

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1597

tcgtcaacgg aaacttcggc ctteggggcct acccataatc cttggggacct tgaacgggta  
60  
ccgggtgggt ccgggtgggtg ttcagcagct agcttggtt cctttcaggc cccgttggt  
120  
ttgggcactg ataccggggg ctcgatccgc caacctggag cggtgaccgg caccgtcggg  
180  
atcaagccga cctacgggttc gacctccga tacggcggtta tcgctatggc ttcattcttg  
240  
gatactcctg ggccctgcgc ccgtaccgtc cttgacgccg cgttgctcca tcaggccatt  
300  
gccggtcacg acgctatgga ccagaccacg attaatcagc ccacccggc ggtcgttgag  
360  
gctgcgcggc aggcagacgt ttccgggggtg cgcattggcg ttgtcacgga gttgagcggg  
420  
cagggttacg accctcaggt cgaggcccg ttccacgagg ctgtcgagat gctaatagag  
480  
gcgggggctg aggtcgttga ggtctcttgc ccgaactttg acctcgctt acctgcttat  
540  
taccttattc agcctgccga ggtgtctagc aacctggctc gttacgacgc catgcgttac  
600  
ggcttacgc  
609

&lt;210&gt; 1598

&lt;211&gt; 203

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1598

Ser	Ser	Thr	Glu	Thr	Ser	Ala	Phe	Gly	Pro	Thr	His	Asn	Pro	Trp	Asp
1				5					10					15	
Leu	Glu	Arg	Val	Pro	Gly	Gly	Ser	Gly	Gly	Gly	Ser	Ala	Ala	Ser	Leu
			20					25					30		
Ala	Ser	Phe	Gln	Ala	Pro	Leu	Ala	Leu	Gly	Thr	Asp	Thr	Gly	Gly	Ser
		35					40					45			
Ile	Arg	Gln	Pro	Gly	Ala	Val	Thr	Gly	Thr	Val	Gly	Ile	Lys	Pro	Thr
	50					55				60					
Tyr	Gly	Ser	Thr	Ser	Arg	Tyr	Gly	Val	Ile	Ala	Met	Ala	Ser	Ser	Leu
	65				70				75					80	
Asp	Thr	Pro	Gly	Pro	Cys	Ala	Arg	Thr	Val	Leu	Asp	Ala	Ala	Leu	Leu
			85					90						95	
His	Gln	Ala	Ile	Ala	Gly	His	Asp	Ala	Met	Asp	Gln	Thr	Thr	Ile	Asn
			100					105						110	
Gln	Pro	Thr	Pro	Ala	Val	Val	Glu	Ala	Ala	Arg	Gln	Ala	Asp	Val	Ser
		115					120					125			
Gly	Val	Arg	Ile	Gly	Val	Val	Thr	Glu	Leu	Ser	Gly	Gln	Gly	Tyr	Asp
	130					135					140				
Pro	Gln	Val	Glu	Ala	Arg	Phe	His	Glu	Ala	Val	Glu	Met	Leu	Ile	Glu
	145				150				155					160	
Ala	Gly	Ala	Glu	Val	Val	Glu	Val	Ser	Cys	Pro	Asn	Phe	Asp	Leu	Ala

```
<210> 1599
<211> 526
<212> DNA
<213> Homo sapiens
```

```
<210> 1600
<211> 134
<212> PRT
<213> Homo sapiens
```

1293

130

<210> 1601  
 <211> 447  
 <212> DNA  
 <213> Homo sapiens

<400> 1601  
 gccggccgcc ccgtttccgc agattctgga ggagtgccga tggccgagtt catctacacc  
 60  
 atgcacaacg tccgaaaggc ggtgggtgac aaagttatcc ttgacaatgt cacgctgtcg  
 120  
 ttcttcccg ggcgaagat tgggtgtgtc ggaccgaatg gcgctggcaa atcgacgatg  
 180  
 ctcaagctca tggctgtgtc cgataagccc aataacggcg atgccaactt ggctaaaggc  
 240  
 gccaccgtcg gaatcttgc tccaggagccc ccgctcaccg aggacaaaac tgttcgcgag  
 300  
 aacgtcgaag aggccgtcgg cgacatcaaa gccaaagtgg cacggttcga ggaagtctcc  
 360  
 gccgagatgg ccaaccctga cgccgacttt gacgccctga tggcggagat gggtagctg  
 420  
 cagaccgagc tcgataacgc caacgcg  
 447

<210> 1602  
 <211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 1602  
 Met Ala Glu Phe Ile Tyr Thr Met His Asn Val Arg Lys Ala Val Gly  
 1 5 10 15  
 Asp Lys Val Ile Leu Asp Asn Val Thr Leu Ser Phe Phe Pro Gly Ala  
 20 25 30  
 Lys Ile Gly Val Val Gly Pro Asn Gly Ala Gly Lys Ser Thr Met Leu  
 35 40 45  
 Lys Leu Met Ala Gly Leu Asp Lys Pro Asn Asn Gly Asp Ala Asn Leu  
 50 55 60  
 Ala Lys Gly Ala Thr Val Gly Ile Leu Leu Gln Glu Pro Pro Leu Thr  
 65 70 75 80  
 Glu Asp Lys Thr Val Arg Glu Asn Val Glu Glu Ala Val Gly Asp Ile  
 85 90 95  
 Lys Ala Lys Leu Ala Arg Phe Glu Glu Val Ser Ala Glu Met Ala Asn  
 100 105 110  
 Pro Asp Ala Asp Phe Asp Ala Leu Met Ala Glu Met Gly Glu Leu Gln  
 115 120 125  
 Thr Glu Leu Asp Asn Ala Asn Ala  
 130 135

<210> 1603  
 <211> 540  
 <212> DNA  
 <213> Homo sapiens



&lt;400&gt; 1603

acgcgtaagc tcaccgaagc catgatggca atgctgctgg aactgcatta cagcaagcag  
 60  
 gaaatccttg aggcgtacct caacgaggtc ttcgtcggtc aggatggcca gcgcgccgtg  
 120  
 cacgggtttg gcttggccag tcagttcttc tttggccagc ctttgtccga gctgaagtgt  
 180  
 catcaagtcg cgttgttggt cgggatggtc aagggcccg cctattacaa cccgcggcgc  
 240  
 aatccggaac gtgcgctcga gcgtcgtaac ctggtgctgg atgtgctgga acagcagggg  
 300  
 gtagccactg ccgaacaagt cgctgccgca aagaaaatgc cgctgggtgt aaccactcgc  
 360  
 ggcaagctgg cggacagctc cttcccaggc tttatcgacc tggtaaacy cagttgcgt  
 420  
 gaagattacc gcgacgaaga cttgaccgaa gaaggcctgc ggattttcac cagtttcgac  
 480  
 ccgattctgc agatgaaagc cgaagcatcg gtgaacgaca cattcaagcg cctgaccggc  
 540

&lt;210&gt; 1604

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1604

Thr	Arg	Lys	Leu	Thr	Glu	Ala	Met	Met	Ala	Met	Leu	Leu	Glu	Leu	His
1				5					10					15	
Tyr	Ser	Lys	Gln	Glu	Ile	Leu	Glu	Ala	Tyr	Leu	Asn	Glu	Val	Phe	Val
			20					25					30		
Gly	Gln	Asp	Gly	Gln	Arg	Ala	Val	His	Gly	Phe	Gly	Leu	Ala	Ser	Gln
		35					40					45			
Phe	Phe	Phe	Gly	Gln	Pro	Leu	Ser	Glu	Leu	Lys	Leu	His	Gln	Val	Ala
	50					55				60					
Leu	Leu	Val	Gly	Met	Val	Lys	Gly	Pro	Ser	Tyr	Tyr	Asn	Pro	Arg	Arg
65					70					75				80	
Asn	Pro	Glu	Arg	Ala	Leu	Glu	Arg	Arg	Asn	Leu	Val	Leu	Asp	Val	Leu
			85						90					95	
Glu	Gln	Gln	Gly	Val	Ala	Thr	Ala	Glu	Gln	Val	Ala	Ala	Ala	Lys	Lys
			100					105						110	
Met	Pro	Leu	Gly	Val	Thr	Thr	Arg	Gly	Lys	Leu	Ala	Asp	Ser	Ser	Phe
	115						120					125			
Pro	Gly	Phe	Ile	Asp	Leu	Val	Lys	Arg	Gln	Leu	Arg	Glu	Asp	Tyr	Arg
	130					135					140				
Asp	Glu	Asp	Leu	Thr	Glu	Glu	Gly	Leu	Arg	Ile	Phe	Thr	Ser	Phe	Asp
145				150					155						160
Pro	Ile	Leu	Gln	Met	Lys	Ala	Glu	Ala	Ser	Val	Asn	Asp	Thr	Phe	Lys
			165					170						175	
Arg	Leu	Thr	Gly												
			180												

&lt;210&gt; 1605

&lt;211&gt; 427

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1605

acgcggttggt gcggtcggtc gcacgcagtc cgtccaagag gtacaggcca gcgttgccgc  
 60  
 cattctttgc gggcgggac tgcactggga tattgctggc catcgctgt gaccacacat  
 120  
 cgacgcgtg gacccaccag cccacctggt cccactcgca cgtgccagta ctgtccgcac  
 180  
 gcaagaaatc gcggtgagct gcgtgcgcct gctgggtgcc gcctgccact acggcaagac  
 240  
 ccagcgctac ggcgactgcc atgatgaccg aaaggacgcg acccctaata gatgcagtca  
 300  
 tctttctcct tcacaaagta tttggttaatt gtcacttagc tttatcgctc ggaatctgtg  
 360  
 aaccgttaac atcccgacgc ggaagctaac tagcaagcag tctaatacac tcccgggcca  
 420  
 aatgttg  
 427

&lt;210&gt; 1606

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1606

Met	Thr	Ala	Ser	Ile	Arg	Gly	Arg	Val	Leu	Ser	Val	Ile	Met	Ala	Val
1				5					10				15		
Ala	Val	Ala	Leu	Gly	Leu	Ala	Val	Val	Ala	Gly	Gly	Thr	Gln	Gln	Ala
			20					25				30			
His	Ala	Ala	His	Arg	Asp	Phe	Leu	Arg	Ala	Asp	Ser	Thr	Gly	Thr	Cys
		35				40					45				
Glu	Trp	Asp	Gln	Val	Gly	Trp	Trp	Val	Gln	Arg	Cys	Asp	Val	Trp	Ser
	50				55						60				
Gln	Ala	Met	Gly	Arg	Asn	Ile	Pro	Val	Gln	Ile	Pro	Pro	Ala	Lys	Asn
	65				70				75					80	
Gly	Gly	Asn	Ala	Gly	Leu	Tyr	Leu	Leu	Asp	Gly	Leu	Arg	Ala	Thr	Asp
			85					90						95	
Arg	Thr	Asn	Ala												
			100												

&lt;210&gt; 1607

&lt;211&gt; 396

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1607

gcacggctcc gctcgcggtc gccgtgatgg tacataccgg cgcgaccgtg atcgattctt  
 60  
 tgccgcaagg caatttactt ccacgtcacg gccgatgcga tgaagatgac gattcgtcaa  
 120  
 cggatgggac tgatcccgtc cgagggcgtc gtggggcgga cgatgatgat cgtggcgacg  
 180

ttgctgtacg gattcatttt gtagcataaa taaggagggg ttcgatgaac aggaaaaccc .  
240  
tttctgttgg caccgattc gttcaaggaa agcatgacgg caaaagaagt ctgtatcgcg  
300  
atggaaaaag gactgagccg cgtctacccc gacgcccggt ttatccatgt gccgatggcg  
360  
gacggaggcg aaggcacggt gcagtcgctg gtcgac  
396

&lt;210&gt; 1608

&lt;211&gt; 56

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1608

Thr	Gly	Lys	Pro	Phe	Leu	Leu	Ala	Pro	Asp	Ser	Phe	Lys	Glu	Ser	Met
1			5					10					15		
Thr	Ala	Lys	Glu	Val	Cys	Ile	Ala	Met	Glu	Lys	Gly	Leu	Ser	Arg	Val
			20				25					30			
Tyr	Pro	Asp	Ala	Arg	Phe	Ile	His	Val	Pro	Met	Ala	Asp	Gly	Gly	Glu
		35				40					45				
Gly	Thr	Val	Gln	Ser	Leu	Val	Asp								
	50					55									

&lt;210&gt; 1609

&lt;211&gt; 505

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1609

acgcgtagat gccacagcgc caggacacac gccaccgcgg agccgaggat gatccacatg  
60  
ggctcgactc acatggacgc catggattcg gcagtggaga gcaggccgcg agcttcgcac  
120  
gcggcccgac tgcgtagtcg cgtcatctca gtgcacatct gttcttcccc gctcatgagg  
180  
ttcgcgccgt aggacatcgt tacgtccagc atggtggcga tctcagcaat gtcacagccg  
240  
gccttgtgga gggcgaggag ccgagcgcgc gtgcttcctg ctggcacgat gcgttcacgt  
300  
gctgcgttga tgtcgtcgat actgatatgc aggatgcgcc cggggtcgaa gacggggaat  
360  
gggggtgaatt ggacgggtccc ccctggccag cgagtcgctg gacgattcga ctggggacat  
420  
gcgcgagcag ggcgacgaca cgccacggaa cgcggcattc atggacgagg gaacggacat  
480  
ggagcgagaa aaagcgggcg tcgac  
505

&lt;210&gt; 1610

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1610

```

Met Pro Arg Ser Val Ala Cys Arg Arg Pro Ala Arg Ala Cys Pro Gln
 1           5           10           15
Ser Asn Arg Pro Thr Thr Arg Trp Pro Gly Gly Thr Val Gln Phe Thr
      20           25           30
Pro Phe Pro Val Phe Asp Pro Gly Arg Ile Leu His Ile Ser Ile Asp
      35           40           45
Asp Ile Asn Ala Ala Arg Glu Arg Ile Val Pro Ala Gly Ser Thr Arg
      50           55           60
Ala Arg Leu Leu Ala Leu His Lys Ala Gly Cys Asp Ile Ala Glu Ile
65           70           75           80
Ala Thr Met Leu Asp Val Thr Met Ser Tyr Ala Ala Asn Leu Met Ser
      85           90           95
Gly Glu Glu Gln Met Cys Thr Glu Met Thr Arg Leu Arg Ser Arg Ala
      100          105          110
Ala Cys Glu Ala Arg Gly Leu Leu Ser Thr Ala Glu Ser Met Ala Ser
      115          120          125
Met

```

&lt;210&gt; 1611

&lt;211&gt; 532

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1611

```

acgcgtgctg cgtttacagt tgcgtctatt gatttaggtg cgcattccaga atttttagga
60
aaaaatgata ttcaattagg caaaaagaa tctgtagagg atactgcgaa agtattagggt
120
agaatgttcg atgggtattga attccgtggt ttttcacaac aagctggtga agatttagcg
180
aagttctctg gtgtaccggg gtggaatgga ttaacagacg attggcatcc tacacaaatg
240
ttagctgatt ttatgacaat aaaagagaat tttggatatc tagaaggaat aaacttaact
300
tacgttggag atggacgtaa taatattgag cattcattaa tggtagcagg tgctatgtta
360
ggtgttaatg taagaatttg tacacctaaa tcattaaatc caaaagaggc atatgttgat
420
attgcaaaaag aaaaagcgag tcaatatggt ggttcagtca tgattacgga taatattgca
480
gaagcagttg aaaatacaga tgctatatat acagatgttt gggtatcgac gg
532

```

&lt;210&gt; 1612

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1612

```

Thr Arg Ala Ala Phe Thr Val Ala Ser Ile Asp Leu Gly Ala His Pro
 1           5           10           15
Glu Phe Leu Gly Lys Asn Asp Ile Gln Leu Gly Lys Lys Glu Ser Val

```

```

      20      25      30
Glu Asp Thr Ala Lys Val Leu Gly Arg Met Phe Asp Gly Ile Glu Phe
      35      40      45
Arg Gly Phe Ser Gln Gln Ala Gly Glu Asp Leu Ala Lys Phe Ser Gly
      50      55      60
Val Pro Gly Trp Asn Gly Leu Thr Asp Asp Trp His Pro Thr Gln Met
65      70      75      80
Leu Ala Asp Phe Met Thr Ile Lys Glu Asn Phe Gly Tyr Leu Glu Gly
      85      90      95
Ile Asn Leu Thr Tyr Val Gly Asp Gly Arg Asn Asn Ile Ala His Ser
      100      105      110
Leu Met Val Ala Gly Ala Met Leu Gly Val Asn Val Arg Ile Cys Thr
      115      120      125
Pro Lys Ser Leu Asn Pro Lys Glu Ala Tyr Val Asp Ile Ala Lys Glu
      130      135      140
Lys Ala Ser Gln Tyr Gly Gly Ser Val Met Ile Thr Asp Asn Ile Ala
145      150      155      160
Glu Ala Val Glu Asn Thr Asp Ala Ile Tyr Thr Asp Val Trp Val Ser
      165      170      175
Thr

```

<210> 1613  
 <211> 584  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1613
nnacgcgttc agccgagaaa tatgctgctt tttgcctgcc acctcacaaa tgctacggca
60
caggcgctcc aggttttgcg cctcctggta cgttgctaca cacttgctca cctcccagcg
120
gtatcaatac aacttgcgaa atgcagacaa ggcccaggcc taagacatgg tagacataca
180
tatatacaag gaattcacta tatattgggt gaaaggagat cttcccgttc ctgttcttcc
240
tctgccgcat cctgtgaagc gttcagggag gtcgacatgg ataattgtcg tatgcctggc
300
acggtaaaagt gtcgcgggct tgtagatgcg tgtgaacgtt ttcgtgactt gaagaggtcg
360
aagctgatgt gttcgcgtga gctcgatgca gcgcgctgcg ttgcgtgcct tgtggtcgat
420
cgtcgccccg atccgataga atgcggagtt gtattttcgt agtactgctc gacaatgcca
480
gtgggcgagg cgatgagttc ctcatttgcg tctttctcga ggtcttggtc catgtccata
540
aacataccaa agctggatgg gtcatacgac ggcgcagcat gcat
584

```

<210> 1614  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1614

```

Xaa Arg Val Gln Pro Arg Asn Met Leu Leu Phe Ala Cys His Leu Thr
 1           5           10           15
Asn Ala Thr Ala Gln Gly Val Gln Val Leu Arg Leu Leu Val Arg Cys
      20           25           30
Tyr Thr Leu Ala His Leu Pro Ala Val Ser Ile Gln Leu Ala Lys Cys
      35           40           45
Arg Gln Gly Pro Gly Leu Arg His Gly Arg His Thr Tyr Ile Gln Gly
      50           55           60
Ile His Tyr Ile Leu Gly Glu Arg Arg Ser Ser Arg Ser Cys Ser Ser
      65           70           75           80
Ser Ala Ala Ser Cys Glu Ala Phe Arg Glu Val Asp Met Asp Asn Val
      85           90           95
Arg Met Pro Gly Thr Val Lys Cys Arg Gly Leu Val Asp Ala Cys Glu
      100          105          110
Arg Phe Arg Asp Leu Lys Arg Ser Lys Leu Met Cys Ser Arg Glu Leu
      115          120          125
Asp Ala Ala Arg Cys Val Ala Cys Leu Val Val Asp Arg Arg Pro Asp
      130          135          140
Pro Ile Glu Cys Gly Val Val Phe Ser
      145          150

```

&lt;210&gt; 1615

&lt;211&gt; 363

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1615

```

gccggcttgc ccgacgcgtc tatgggtgat gttctgtcct ctgtcgtcgg gccgtggggc
60
tcgggtgcttg tcagtgcctg tgatcatcatt tccctgcttg gggctctact ggccctggatc
120
ctactgtgctg gtgagacgat gcaggtgccg ggtgaggacg gcacccatgcc gaaactgttc
180
ggacggatca acaaacatga ggctccagct cccgctttgt ggatcaccaa catcgtctcc
240
cagatatgcc ttgtcatgac ggtgttgtgg gacggtgctt acttggcgat ggcgaccctg
300
gctgccgcc tcatcctggt gccgtacctg ctgtcagccg cattcgcctt gaagatgggtg
360
atc
363

```

&lt;210&gt; 1616

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1616

```

Ala Gly Leu Pro Asp Ala Ser Met Gly Asp Val Leu Ser Ser Val Val
 1           5           10           15
Gly Pro Trp Gly Ser Val Leu Val Ser Ala Gly Val Ile Ile Ser Leu
      20           25           30
Leu Gly Ala Leu Leu Ala Trp Ile Leu Leu Cys Gly Glu Thr Met Gln

```

```

      35          40          45
Val Pro Gly Glu Asp Gly Thr Met Pro Lys Leu Phe Gly Arg Ile Asn
      50          55          60
Lys His Glu Ala Pro Ala Pro Ala Leu Trp Ile Thr Asn Ile Val Ser
      65          70          75          80
Gln Ile Cys Leu Val Met Thr Val Leu Trp Asp Gly Ala Tyr Leu Ala
      85          90          95
Met Ala Thr Leu Ala Ala Ala Leu Ile Leu Val Pro Tyr Leu Leu Ser
      100          105          110
Ala Ala Phe Ala Leu Lys Met Val Ile
      115          120

```

&lt;210&gt; 1617

&lt;211&gt; 447

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1617

```

accggtgact acctgtggga gaagaagggc atcgttccca tcctcaagat tgataagggc
60
ctggctgacg agggctgcca cggtctcttc atgaagccga ttcccggcct cgacgagttg
120
gtgcaccgcg ccgtcgagga gaagcacatc ttcggtacca aggagcgtc tgtcatcctg
180
gatgacgaca aagctggcat cgaaaagatt gtcgaccagc agttcgaact ggccgaacag
240
gtgcgcgctg cgggtcttgt gccgatcctc gaacccgagg tcgacatcca cgtccacat
300
aaggagaagg ctgaggaaaag gctgcacaac ctcatccgcg agcacatcga ctctctgccg
360
ctcgacgcca agatcatgtt gaagctgacg atcccagatt ccgaagacct gtatgccgac
420
ctcattgcgg atccgaaggt cctacgc
447

```

&lt;210&gt; 1618

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1618

```

Thr Gly Asp Tyr Leu Trp Glu Lys Lys Gly Ile Val Pro Ile Leu Lys
1      5      10      15
Ile Asp Lys Gly Leu Ala Asp Glu Gly Cys His Val Arg Leu Met Lys
      20      25      30
Pro Ile Pro Gly Leu Asp Glu Leu Val His Arg Ala Val Glu Glu Lys
      35      40      45
His Ile Phe Gly Thr Lys Glu Arg Ser Val Ile Leu Asp Asp Asp Lys
      50      55      60
Ala Gly Ile Glu Lys Ile Val Asp Gln Gln Phe Glu Leu Ala Glu Gln
      65      70      75      80
Val Arg Ala Ala Gly Leu Val Pro Ile Leu Glu Pro Glu Val Asp Ile
      85      90      95
His Ala Pro His Lys Glu Lys Ala Glu Glu Arg Leu His Asn Leu Ile

```

```

          100          105          110
Arg Glu His Ile Asp Ser Leu Pro Leu Asp Ala Lys Ile Met Leu Lys
      115          120          125
Leu Thr Ile Pro Ser Ser Glu Asp Leu Tyr Ala Asp Leu Ile Ala Asp
      130          135          140
Pro Lys Val Leu Arg
145

```

&lt;210&gt; 1619

&lt;211&gt; 355

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1619

```

nnggtaccga aaccctgtgc gctaccgcat aaaatcaaag gaactagtat gcataacgta
60
acaacaaatg gtgcctccat tcccgcctt ggcttggca cttccgtat gcccgcgaa
120
gatgtgcttc gcacgtccc ttacgcgtc aaggtggtt ttcgccatgt cgataccgag
180
cagatttatg gcaatgaagt cgaggctcgg gaagcaattg cgacttccgg cgttcagcgt
240
ggcgacatct ttctgaccac aaaagtctgg gtagataatt ataagcatga tgctttcatc
300
gcatctgtcg atgaaagcct taccaagctt aagaccgact atgtcgatct gctgc
355

```

&lt;210&gt; 1620

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1620

```

Xaa Val Pro Lys Pro Val Ser Leu Pro His Lys Ile Lys Gly Thr Ser
 1          5          10          15
Met His Asn Val Thr Thr Asn Gly Ala Ser Ile Pro Ala Leu Gly Leu
      20          25          30
Gly Thr Phe Arg Met Pro Gly Glu Asp Val Leu Arg Ile Val Pro Tyr
      35          40          45
Ala Leu Lys Ala Gly Phe Arg His Val Asp Thr Ala Gln Ile Tyr Gly
      50          55          60
Asn Glu Val Glu Val Gly Glu Ala Ile Ala Thr Ser Gly Val Gln Arg
      65          70          75          80
Gly Asp Ile Phe Leu Thr Thr Lys Val Trp Val Asp Asn Tyr Lys His
      85          90          95
Asp Ala Phe Ile Ala Ser Val Asp Glu Ser Leu Thr Lys Leu Lys Thr
      100          105          110
Asp Tyr Val Asp Leu Leu
      115

```

&lt;210&gt; 1621

&lt;211&gt; 386

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



&lt;400&gt; 1621

gcgcgccatg gaggcgcccc gggcgcgcc aggatgctcc aggccaaagt aagcgggtccg  
 60  
 gctgggggtcg gcggggacccg cgggcatgt acggcgacat attcaacgcc acggggcggg  
 120  
 ccccgaggc ggcggtaggc agcgcgctgg cccaggagc cacggtcaag gcagaaggcg  
 180  
 ctttgccgct ggagctggcc actgcgcgcg gtatgagga cggcgcgcc acaaagccc  
 240  
 acctgcccac ctacctgctg ctcttcttcc tgctgctgct ctggggggcg ctggcgggc  
 300  
 tcttcacgg ttgccagctg cgccattcgg ccttcgcgcg gctgccccac gaccgcttcg  
 360  
 ctgcgacgc ccgcgcgcc ggaagg  
 386

&lt;210&gt; 1622

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1622

Met Glu Ala Pro Arg Val Ala Pro Gly Cys Ser Arg Pro Ser Glu Ala  
 1 5 10 15  
 Val Arg Leu Gly Ser Ala Gly Pro Ala Gly His Val Arg Arg His Ile  
 20 25 30  
 Gln Arg His Gly Ala Gly Pro Arg Gly Gly Gly Arg Gln Arg Ala Gly  
 35 40 45  
 Pro Arg Ser His Gly Gln Gly Arg Arg Arg Phe Ala Ala Gly Ala Gly  
 50 55 60  
 His Cys Ala Arg Tyr Glu Gly Arg Arg Gly His Lys Ala Arg Pro Ala  
 65 70 75 80  
 His Leu Pro Ala Ala Leu Leu Pro Ala Ala Leu Gly Gly Ala Arg  
 85 90 95  
 Arg Pro Leu His Arg Leu Pro Ala Ala Pro Phe Gly Leu Arg Arg Ala  
 100 105 110  
 Ala Pro Arg Pro Leu Arg Ser Arg Arg Pro Arg Ala Arg Lys  
 115 120 125

&lt;210&gt; 1623

&lt;211&gt; 314

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1623

nctgggtgcc agagcctcgt cggggtccag cccaggggc ttgcgagtc agacacttgg  
 60  
 ggcccttgct tgtggttttt ctgggagctt tgggcccagg gttccccgga cccttcctg  
 120  
 aacttttccg cagtttcaga ggagagtctg caagtgagag ctgcagtgc tgtgccttgt  
 180  
 gcttggcacc caagcagggc atgggagtct taagtgaac cagggcctca aggacaacag  
 240

agagccgcat ggcagggtag acacctggat aaaagtgggt gggggaagcc cactgctgca  
 300  
 ccccgggcat tgct  
 314

<210> 1624  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 1624  
 Met Pro Gly Val Gln Gln Trp Ala Ser Pro Thr His Phe Tyr Pro Gly  
 1 5 10 15  
 Val Tyr Pro Ala Met Arg Leu Ser Val Val Leu Glu Ala Leu Val Pro  
 20 25 30  
 Leu Lys Thr Pro Met Pro Cys Leu Gly Ala Lys His Lys Ala Gln Ser  
 35 40 45  
 Leu Gln Leu Ser Leu Ala Asp Ser Pro Leu Lys Leu Arg Lys Ser Ser  
 50 55 60  
 Gly Lys Gly Pro Gly Asn Pro Arg Pro Lys Ala Pro Arg Lys Thr Thr  
 65 70 75 80  
 Ser Lys Gly Pro Lys Cys Leu Thr Arg Lys Gly Pro Gly Ala Gly Pro  
 85 90 95  
 Arg Arg Gly Ser Gly His Gln  
 100

<210> 1625  
 <211> 619  
 <212> DNA  
 <213> Homo sapiens

<400> 1625  
 acgcgtactc agcagcaagt tctgctgagc cccaaatcca cacagactga gcctggacca  
 60  
 gggctggggc ctccttatcc aagccaatcc agggaaacac tgtgctgact tcaaggcaga  
 120  
 agggacaaga aagcatgact gtgcacaaat tggctttgca gccatctcca ccaggtagcc  
 180  
 ctgggagcac ctgggaagaa gccggggccat gcagggagcc caacctcacc ctgcattcag  
 240  
 aaccgggcct tggaatggcc tgatctgagc cctagcaccc ctgggaagcc gcccaccttt  
 300  
 cttctggcct ctgggaagaa gatgggaatt ttaaggccat gggagaagac actcctggat  
 360  
 tctttcagct tctccacca cccctgctc cagatgtaat ctgggaagac tggggagtca  
 420  
 ggggcacagt gagttggagc aggggattgg agggtttgtg ggacagcctt ccagggcacc  
 480  
 tcaggagctg aattatttaa gccagctgcc cgtgggcccc gctcccagcc cttcctgttt  
 540  
 acacagactc cgtccatagc agacaccttc ccagagcctg ggtgacaata ggctgggtgt  
 600  
 gttttctgca atcttatag  
 619

<210> 1626  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 1626  
 Met Asp Gly Val Cys Val Asn Arg Lys Gly Trp Glu Arg Gly Pro Arg  
   1                  5                  10                  15  
 Ala Ala Gly Leu Asn Asn Ser Ala Pro Glu Val Pro Trp Lys Ala Val  
                   20                  25                  30  
 Pro Gln Thr Leu Gln Ser Pro Ala Pro Thr His Cys Ala Pro Asp Ser  
           35                  40                  45  
 Pro Val Phe Pro Asp Tyr Ile Trp Ser Arg Gly Trp Val Glu Lys Leu  
           50                  55                  60  
 Lys Glu Ser Arg Ser Val Phe Ser His Gly Leu Lys Ile Pro Ile Phe  
 65                  70                  75                  80  
 Phe Pro Glu Ala Arg Arg Lys Val Gly Gly Phe Pro Gly Val Leu Gly  
                   85                  90                  95  
 Leu Arg Ser Gly His Ser Lys Ala Arg Phe  
           100                  105

<210> 1627  
 <211> 481  
 <212> DNA  
 <213> Homo sapiens

<400> 1627  
 naccggtgcg ttgtgcccacat gccttgctcga acaaggccat ataggccgta cgcagctgag  
 60  
 gatcaccagt gggcgagggg gcaacgcgcg tgcgcgcggg atgcaaatca gtcattgatga  
 120  
 cacgaagtct atcgggatcc gctgacagac tccggtaaag ttcccgccat ggcagaacct  
 180  
 actggaaacc cggtgagtc cagctcggac ttcattcatc aggttggttcg cgcggacatc  
 240  
 caacaggaca cctacggcgg gcgcgtccag acccggttcc cactgagcc taacggctac  
 300  
 ctccacattg gccacgcgaa ggccatcgtc accgatttcg gcgttgccga ggatttcggc  
 360  
 ggcacctgca acctgagact tgatgatact aatccaggca ccgaggaaac cgagtatgtc  
 420  
 gagtcgatcg ttgcagacat tgagtgggta ggttactccc cggcccacgt tgtccacgcg  
 480  
 t  
 481

<210> 1628  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 1628  
 Met Ala Glu Pro Thr Gly Asn Pro Ala Glu Ser Ser Ser Asp Phe Ile

```

      1             5             10             15
His Gln Val Val Arg Ala Asp Ile Gln Gln Asp Thr Tyr Gly Gly Arg
      20             25             30
Val Gln Thr Arg Phe Pro Pro Glu Pro Asn Gly Tyr Leu His Ile Gly
      35             40             45
His Ala Lys Ala Ile Val Thr Asp Phe Gly Val Ala Glu Asp Phe Gly
      50             55             60
Gly Thr Cys Asn Leu Arg Leu Asp Asp Thr Asn Pro Gly Thr Glu Glu
      65             70             75             80
Thr Glu Tyr Val Glu Ser Ile Val Ala Asp Ile Glu Trp Leu Gly Tyr
      85             90             95
Ser Pro Ala His Val Val His Ala
      100

```

&lt;210&gt; 1629

&lt;211&gt; 4519

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1629

```

ccaaattgct ggaagtgtcc aaagtgtctac caggaggaca gctcggagaa agcccagaag
60
cggaataatgg aagagagtga cgaagaagct gtgcaagcca aagtcctgcy gcccctgcgg
120
agctgcgatg agcctctcac gccccgcct cattcaccca cttccatgct gcagctcatc
180
catgaccggg ttcccccccg gggatgtgtg actcgggtcat cccctggggc tggccccagc
240
gaccaccaca gtgccagccg cgatgagcgc ttcaaacggc ggcagttgct gcggctgcag
300
gccacagagc gcaccatggt acgggaaaag gagaacaatc ccagcggcaa aaaggagctg
360
tctgaagtgt agaaagccaa gatccgggga tcgtacctca ctgtcacgct acagaggccc
420
accaaagagc tccacgggac atccattgtg cccaagctgc aggccatcac ggcctcctct
480
gccaaccttc gccattcccc ccgtgtgcta gtgcagcact gccagccccg aacccccag
540
cgtggggatg aggaggggct ggggggagag gaggaggaag aggaggagga ggaggaggaa
600
gatgacagtg cagaggaggg ggggtgcagcc aggctgaatg gccggggcag ttgggctcag
660
gatggagacg aaagctggat gcagcgggag gtctggatgt ctgtcttccg ctacctcagc
720
cgcagagaac tttgtgaatg tatgagagtg tgcaagacgt ggtataaatg gtgctgcgac
780
aagagacttt ggacaaaaat tgacttgagt aggtgtaagg ccattgtgcc ccaggccctc
840
agtggcatca tcaagaggca gccagtcagc cttgacctca gttggaccaa catctctaaa
900
aagcaactga catggctcgt caataggctg ccaggactga aagacctcct cctagcaggc
960
tgetcctggg ctgcagtcctc tgcctcagc acctccagct gcccccttct caggaccctt
1020

```

gatcttcggt gggcagtagg aatcaaggac cctcaaattc gggacttget tactccaccg  
1080  
gctgataaac caggtcagga caatcgagc aagctccgga acatgaccga cttccggctg  
1140  
gcaggccttg acatcacaga tgccacgctt cgcctcataa ttccgccacat gccctcctg  
1200  
tctcgactcg acctcagtca ctgcagccac cttacagatc agtcctccaa tctactcact  
1260  
gctgtcgggt cttccactcg ctactctctc acagagctca atatggcagg ttgcaataaa  
1320  
ttgacagacc agaccctgat ctacctacgg cgcattgcc aagtcacctt gatcgacctt  
1380  
cgaggatgca agcagatcac tcgaaaagcc tgcgagcact tcatctcaga cttgtccatc  
1440  
aacagcctct actgectgtc tgacgagaag ctgatacaga agatcagcta agacacacc  
1500  
agcccgatt caacaggaaa ccgatcttcc cctgactccc caccgaggag agcctctcct  
1560  
cgaccctgca cgggctctgg ggccagcgtc acactccctc tctgctctcc tgtcccttga  
1620  
gcccttctc tacagggtgg gcagagaggg tgggtggacac caggcttctc tgcctgctcc  
1680  
tctccctcct aaggaaaagg gagtagcaga ttgatctgag gggaaagcac aggctgtgct  
1740  
gtcaggcgc ctgctcgctt actcgctgc caggaggcgc ggctctcagt ttgggtgtt  
1800  
tgtgcaacct tcatctgcac tgggccctgt gccctctctc cccatccatg gtcgccagca  
1860  
gtgctgtgtt ctgagcaaac tcccaggga gaaaacggcc ctgtctccat ggccagggtc  
1920  
ttgtgtgtc cagtgcgcgt ctctctcca tcacactctc ccggcttgcg caggaggggc  
1980  
cagcagcccc aggagtccca gaccgtgct gatcacactg gtgctgttga gatctccaa  
2040  
acctcagtc cttaactgtg ctctccctcc tttctctctc cttgagcttg gttctgccca  
2100  
gcaactgtgc ttgttccat aattagggtt cccacccag cctaccgac ttacttgcta  
2160  
gtctctatga ggtccttatt gcacttattg gsgttgaagc tcttcagagg agctggaact  
2220  
gtctacccca gggacacacc catttcgttg ctaccaagt ggattctgag acaggcacca  
2280  
tctccttgtt cccctctctt cttttgctc ccaactgactg cccttttcca tgtgtcttca  
2340  
ttctgcctga agaaggcttt cccaggatgc acgtcctcag agggagcagc ctatctcccc  
2400  
caagctggag gggcagagg actgggcaa gcccacact gcctcccagc caggctcctc  
2460  
caggcctctg gtttagcga gcccctgag cccaggcctg tgtctagccc cagtggctca  
2520  
ctgaactttc agggcagtc gggggtcctg cttagaagcc agtcaccagc cctctgcctg  
2580  
cagccatgga aggggtgtg cagtgctc tgtgtgtgtg gctgagtgtt ttctgcgcgt  
2640

gtgtgtggag ggagggaggg aggggagcat ggtgtctccc gctccaccgc cctttgttga  
2700  
gccccatcag ctgccccctt ttactttgca ttgaacggcc tgtccaaaga tcctctctct  
2760  
agggcagcag agagcttttt gcactttaaa aaaaaaaga aagaaagaaa ggtcggaatt  
2820  
tcttttgggt caatattttt aagtgtgtga ggagatgctc agtagcagca gcctatggca  
2880  
agagcttata aatgattgat gcaaatttgc actctgctcc ccctctgtaa ggatactgat  
2940  
agcacaacct ctcccccca ccccgccccg ccttttgggc gtccatccct gtccctttct  
3000  
ggccctcttc ctgtagccca gtctcaggct ttcctcttcc tgaagcccta cagagttagg  
3060  
gaatggagcc caggcaccag ggggtctaaag tgtgagccac tgagaagaga gacgccaaact  
3120  
gcacccttgc cacttccaaa gcaatagagg cagagtgggc ccctctttgc cacctaggcc  
3180  
agttttgacc ctggcattaa ctggccttag aagaaactgg atcctggtag ggggtggcat  
3240  
tttggttgtt tcttccaatc tgetgaatct tttgactgca ccttaciaaac agcagtctgc  
3300  
tcccatgacc ctctgcccac ttccattgggt ctccaggccc caataatctg ggggtgaaac  
3360  
tttgaggaaa tgccagtgc tttattccaga gtgcctcagt taggggaact tctctgtaaa  
3420  
gaaccttggg tattgagcaa aaaccttatt atcgttaatg acctataatt ggaagcttcc  
3480  
tgcccttttc tttggttgc cctgtggaaa atactgaaaa gattactttg ttttattttg  
3540  
ttgtcttttt ataaaagggg aggtggagag accccttcag agcagggatt gtgccgggag  
3600  
agtgcctctg actttgggac atttcatcca cagaaatttc caagccaatg gtttcttttg  
3660  
ggttttgggt tttatgtttg ttttttgggg tttgaaaaa catgcatttt taccgtgcac  
3720  
gtaaatgggt cagcagaaaa gggagcccg aaaaggcagc agatggacca tgcccttgct  
3780  
gggttttcct tttctttggg actgtgaggg gaaatggttt ttagaggtga gggttgtcc  
3840  
atgtggagga aagaagtgtc tctgttgggg gacagaggaa cctggggagt ccatcgcatg  
3900  
tcctacaatc tgctcttaga cagggccttg ccaggagagc ctgccctcag actgcaggac  
3960  
cagaaccctt gcctccatct ttccaagcac cggggcgaaa aaccacaaag gaaaggaaga  
4020  
aaatttata atataataa taaaatcact tgggtattaa aaaaataact gctccataaa  
4080  
taaaactcct aaagtcactt atgtttaag ggtttggttg tgttttttgt ttttcggaga  
4140  
aatattgtaa atatatattt ttttgttgc gatttagagt caatctccaa tgttgctga  
4200  
aaaagtttaa attaaatga agcattaagg ggataagtct tatgctatct cagttgacac  
4260

attgagggtta ttttgggccca gagaaggagg aagctagttg gactttgttt tgttttccaa  
 4320  
 aagttctcca ctattggttt tagagagagc aaggacatct ttcctctgac acgtgggaat  
 4380  
 ggggtgatatt tgtgtaataa aattttttaa agacaaaaaa agaaatagcc tccaatggga  
 4440  
 aatatttttaa tttagggttt gtttttgttt ggggggtttt gtttttttaa aaaaataaaa  
 4500  
 aggcctttaa aacaaaaaa  
 4519

<210> 1630

<211> 496

<212> PRT

<213> Homo sapiens

<400> 1630

Pro	Asn	Cys	Trp	Glu	Cys	Pro	Lys	Cys	Tyr	Gln	Glu	Asp	Ser	Ser	Glu
1				5					10					15	
Lys	Ala	Gln	Lys	Arg	Lys	Met	Glu	Glu	Ser	Asp	Glu	Glu	Ala	Val	Gln
		20					25						30		
Ala	Lys	Val	Leu	Arg	Pro	Leu	Arg	Ser	Cys	Asp	Glu	Pro	Leu	Thr	Pro
		35				40						45			
Pro	Pro	His	Ser	Pro	Thr	Ser	Met	Leu	Gln	Leu	Ile	His	Asp	Pro	Val
		50				55					60				
Ser	Pro	Arg	Gly	Met	Val	Thr	Arg	Ser	Ser	Pro	Gly	Ala	Gly	Pro	Ser
				70						75				80	
Asp	His	His	Ser	Ala	Ser	Arg	Asp	Glu	Arg	Phe	Lys	Arg	Arg	Gln	Leu
			85						90					95	
Leu	Arg	Leu	Gln	Ala	Thr	Glu	Arg	Thr	Met	Val	Arg	Glu	Lys	Glu	Asn
			100					105						110	
Asn	Pro	Ser	Gly	Lys	Lys	Glu	Leu	Ser	Glu	Val	Glu	Lys	Ala	Lys	Ile
		115				120						125			
Arg	Gly	Ser	Tyr	Leu	Thr	Val	Thr	Leu	Gln	Arg	Pro	Thr	Lys	Glu	Leu
		130				135					140				
His	Gly	Thr	Ser	Ile	Val	Pro	Lys	Leu	Gln	Ala	Ile	Thr	Ala	Ser	Ser
				150						155				160	
Ala	Asn	Leu	Arg	His	Ser	Pro	Arg	Val	Leu	Val	Gln	His	Cys	Pro	Ala
				165				170						175	
Arg	Thr	Pro	Gln	Arg	Gly	Asp	Glu	Glu	Gly	Leu	Gly	Gly	Glu	Glu	Glu
			180				185						190		
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Asp	Ser	Ala	Glu	Glu	Gly	Gly
		195					200				205				
Ala	Ala	Arg	Leu	Asn	Gly	Arg	Gly	Ser	Trp	Ala	Gln	Asp	Gly	Asp	Glu
		210				215					220				
Ser	Trp	Met	Gln	Arg	Glu	Val	Trp	Met	Ser	Val	Phe	Arg	Tyr	Leu	Ser
				230						235				240	
Arg	Arg	Glu	Leu	Cys	Glu	Cys	Met	Arg	Val	Cys	Lys	Thr	Trp	Tyr	Lys
			245						250					255	
Trp	Cys	Cys	Asp	Lys	Arg	Leu	Trp	Thr	Lys	Ile	Asp	Leu	Ser	Arg	Cys
			260					265					270		
Lys	Ala	Ile	Val	Pro	Gln	Ala	Leu	Ser	Gly	Ile	Ile	Lys	Arg	Gln	Pro
		275					280					285			
Val	Ser	Leu	Asp	Leu	Ser	Trp	Thr	Asn	Ile	Ser	Lys	Lys	Gln	Leu	Thr

```

      290              295              300
Trp Leu Val Asn Arg Leu Pro Gly Leu Lys Asp Leu Leu Leu Ala Gly
305              310              315              320
Cys Ser Trp Ser Ala Val Ser Ala Leu Ser Thr Ser Ser Cys Pro Leu
      325              330              335
Leu Arg Thr Leu Asp Leu Arg Trp Ala Val Gly Ile Lys Asp Pro Gln
      340              345              350
Ile Arg Asp Leu Leu Thr Pro Pro Ala Asp Lys Pro Gly Gln Asp Asn
      355              360              365
Arg Ser Lys Leu Arg Asn Met Thr Asp Phe Arg Leu Ala Gly Leu Asp
      370              375              380
Ile Thr Asp Ala Thr Leu Arg Leu Ile Ile Arg His Met Pro Leu Leu
385              390              395              400
Ser Arg Leu Asp Leu Ser His Cys Ser His Leu Thr Asp Gln Ser Ser
      405              410              415
Asn Leu Leu Thr Ala Val Gly Ser Ser Thr Arg Tyr Ser Leu Thr Glu
      420              425              430
Leu Asn Met Ala Gly Cys Asn Lys Leu Thr Asp Gln Thr Leu Ile Tyr
      435              440              445
Leu Arg Arg Ile Ala Asn Val Thr Leu Ile Asp Leu Arg Gly Cys Lys
      450              455              460
Gln Ile Thr Arg Lys Ala Cys Glu His Phe Ile Ser Asp Leu Ser Ile
465              470              475              480
Asn Ser Leu Tyr Cys Leu Ser Asp Glu Lys Leu Ile Gln Lys Ile Ser
      485              490              495

```

&lt;210&gt; 1631

&lt;211&gt; 330

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1631

acgcgtgctc agccaagcct tagatgaaaa tgcgcttgct gacttttgtg cgatgcaatg

60

tcagaacccg aacacacgtg cttcagacat ggcgggatgg aagacacttc agactctttt

120

ccatgttgac tctcgcgacg agcttggtga gttgcttggc ttttcgaaag acgacattac

180

caaccaagtt cagcaagctg tgggcgcctt ggggttaccg ccactagaag atgaaaacgc

240

acaaggtgaa gatccggcgt cgcaggtecc gccagtcacc gacgaggacc ccactgcttt

300

cttcgatcaa gttccagatg tgcctctaga

330

&lt;210&gt; 1632

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1632

Met Gln Cys Gln Asn Pro Asn Thr Arg Ala Ser Asp Met Ala Gly Trp

1

5

10

15

Lys Thr Leu Gln Thr Leu Phe His Val Asp Ser Arg Asp Glu Leu Val



```

      20      25      30
Glu Leu Leu Gly Phe Ser Lys Asp Asp Ile Thr Asn Gln Val Gln Gln
      35      40      45
Ala Val Gly Ala Leu Gly Leu Pro Pro Leu Glu Asp Glu Asn Ala Gln
      50      55      60
Gly Glu Asp Pro Ala Ser Gln Val Pro Pro Val Thr Asp Glu Asp Pro
65      70      75      80
Thr Ala Phe Phe Asp Gln Val Pro Asp Val Pro Leu
      85      90

```

<210> 1633  
 <211> 259  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1633
ngggggacgt tggctatcaa tcttgctgga gctttcgtag tggcgacttt gctcgagctg
60
ctcgccacg ctggccctgg cccaggggtt cgtcgagcgg tgcggctatg catcggtacc
120
ggattgttag gtggatttac gacttattcc gccctcacgg tggaaaccgg ccaacgtgtg
180
atgtcagggc agtggttatg gggatttggc tatcttttga cgagtgtcgt ggcaggtgca
240
ttgttggcat gggatcatga
259

```

<210> 1634  
 <211> 86  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1634
Xaa Gly Thr Leu Ala Ile Asn Leu Val Gly Ala Phe Val Leu Ala Thr
1      5      10      15
Leu Leu Glu Leu Leu Val His Ala Gly Pro Gly Pro Gly Val Arg Arg
      20      25      30
Ala Val Arg Leu Cys Ile Gly Thr Gly Leu Leu Gly Gly Phe Thr Thr
      35      40      45
Tyr Ser Ala Leu Thr Val Glu Thr Gly Gln Arg Val Met Ser Gly Gln
      50      55      60
Trp Leu Trp Gly Ile Ala Tyr Leu Leu Thr Ser Val Val Ala Gly Ala
65      70      75      80
Leu Leu Ala Trp Val Met
      85

```

<210> 1635  
 <211> 792  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1635
nggtcctttt ttatgaaccg gcggactcgg ttggcgttgt ggggcagggg gtggtggagc
60

```

aagatggcgg ctcactctgtc ctacggccga gtgaacctaa acgtgttgcg cgaggcgggtg  
120  
cgtcgcgagc tgcgcgagtt cctggacaag tgcgcaggaa gcaaggcaat agtttgggat  
180  
gaatacctaa ctggaccctt tggcctgatt gcacagtatt cactattgaa ggaacatgaa  
240  
gtggaaaaaa tgttcacact taaaggaaat cgtttgccgg cagctgatgt gaagaatata  
300  
atTTTTTTtg tcagaccag gctagagttg atggatataa tcgctgaaaa cgtgctcagt  
360  
gaagatagac gagggccaac gagagatttt catattctgt ttgtgccacg ccgtagcctg  
420  
ttgtgcgaac agcgggtgaa ggatctgggt gtcttgggat cctttattca caggaggag  
480  
tacagcttag atctcatcc attcgatggg gatctcttat ccatggaatc agagggtgca  
540  
ttcaaagagt gctacctgga gggtgaccag acgagcctgt accacgcagc caaggggctg  
600  
atgaccctgc aagctctgta tggaacgac cccagatct ttgggaaagg agaatgcgct  
660  
cgggtgagaa ccggctgctt tgtgggtgta aaggagggcc cttcacacc caaaaggag  
720  
gaggaacggg aagctcctta caaacaatt cagttgatct taattattta tgaatactgt  
780  
actcatgaat tc  
792

&lt;210&gt; 1636

&lt;211&gt; 243

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1636

Met	Ala	Ala	His	Leu	Ser	Tyr	Gly	Arg	Val	Asn	Leu	Asn	Val	Leu	Arg
1			5						10					15	
Glu	Ala	Val	Arg	Arg	Glu	Leu	Arg	Glu	Phe	Leu	Asp	Lys	Cys	Ala	Gly
			20				25						30		
Ser	Lys	Ala	Ile	Val	Trp	Asp	Glu	Tyr	Leu	Thr	Gly	Pro	Phe	Gly	Leu
			35				40					45			
Ile	Ala	Gln	Tyr	Ser	Leu	Leu	Lys	Glu	His	Glu	Val	Glu	Lys	Met	Phe
			50				55				60				
Thr	Leu	Lys	Gly	Asn	Arg	Leu	Pro	Ala	Ala	Asp	Val	Lys	Asn	Ile	Ile
							70				75			80	
Phe	Phe	Val	Arg	Pro	Arg	Leu	Glu	Leu	Met	Asp	Ile	Ile	Ala	Glu	Asn
														95	
Val	Leu	Ser	Glu	Asp	Arg	Arg	Gly	Pro	Thr	Arg	Asp	Phe	His	Ile	Leu
														110	
Phe	Val	Pro	Arg	Arg	Ser	Leu	Leu	Cys	Glu	Gln	Arg	Leu	Lys	Asp	Leu
														125	
Gly	Val	Leu	Gly	Ser	Phe	Ile	His	Arg	Glu	Glu	Tyr	Ser	Leu	Asp	Leu
														140	
Ile	Pro	Phe	Asp	Gly	Asp	Leu	Leu	Ser	Met	Glu	Ser	Glu	Gly	Ala	Phe
														160	
Lys	Glu	Cys	Tyr	Leu	Glu	Gly	Asp	Gln	Thr	Ser	Leu	Tyr	His	Ala	Ala

```

                165                170                175
Lys Gly Leu Met Thr Leu Gln Ala Leu Tyr Gly Thr Ile Pro Gln Ile
                180                185                190
Phe Gly Lys Gly Glu Cys Ala Arg Val Arg Thr Gly Cys Phe Val Val
                195                200                205
Val Lys Glu Gly Pro Ser His Pro Lys Arg Glu Glu Glu Arg Glu Ala
                210                215                220
Pro Tyr Lys Gln Ile Gln Leu Ile Leu Ile Ile Tyr Glu Tyr Cys Thr
225                230                235                240
His Glu Phe

```

<210> 1637  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1637
ntcatgatga cacagacccc cgcgcaccca ggcttgatct ccttgcaagg catcggaaca
60
cggttatcagt tggccgggca aaagctgtcc attctcaatg acgtgtgcct gtccatctcc
120
cgcggtgaca gctgcggcat cctcggcgcc tccggttccg gcaagagcac cctgctcaat
180
atccttggcc tgctggacct gccaacagc ggccagtacc actttgccgg ccacgatatt
240
ttggcgctca ccccgacga actgtcggcg atccgcaact cagntnnaat ggttggttgc
300
cagagcttca acctgctgcc gcgcctcagc gccctggaca acgtcgccct gccctg
357

```

<210> 1638  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1638
Xaa Met Met Thr Gln Thr Pro Ala His Pro Gly Leu Ile Ser Leu Gln
1      5      10      15
Gly Ile Gly Lys Arg Tyr Gln Leu Ala Gly Gln Lys Leu Ser Ile Leu
20     25     30
Asn Asp Val Cys Leu Ser Ile Ser Arg Gly Asp Ser Cys Gly Ile Leu
35     40     45
Gly Ala Ser Gly Ser Gly Lys Ser Thr Leu Leu Asn Ile Leu Gly Leu
50     55     60
Leu Asp Leu Pro Asn Ser Gly Gln Tyr His Phe Ala Gly His Asp Ile
65     70     75     80
Leu Ala Leu Thr Pro Asp Glu Leu Ser Ala Ile Arg Asn Ser Xaa Xaa
85     90     95
Met Val Val Phe Gln Ser Phe Asn Leu Leu Pro Arg Leu Ser Ala Leu
100    105    110
Asp Asn Val Ala Leu Pro Leu
115

```

<210> 1639  
 <211> 396  
 <212> DNA  
 <213> Homo sapiens

<400> 1639  
 acgcgtgtac gtgcgcgtgt gatttcacat gccctcaaag atattcttac tgaaggcgat  
 60  
 aaagttatcg ttatgggaca taagcgacca gatttagatg ctataggtgc agctatcgga  
 120  
 gtttcgcgct ttgcatcaat gaataattta gaggcattta tcgttcttaa tgattctgat  
 180  
 attgatccga cattacgtcg tggtatggat gagattgata agaaaccgga actaaaagaa  
 240  
 cgctttgtaa catcggtatga ggcttgggat atgatgactt ctaagacgac tgcgttgttt  
 300  
 gtagatacac ataaacctga aatggtctta gatgaaaatg tcttaaataa agcaaaccgc  
 360  
 aaagtagtca ttgatcatca tagacgtggc gaaact  
 396

<210> 1640  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 1640  
 Thr Arg Val Arg Ala Arg Val Ile Ser His Ala Leu Lys Asp Ile Leu  
 1 5 10 15  
 Thr Glu Gly Asp Lys Val Ile Val Met Gly His Lys Arg Pro Asp Leu  
 20 25 30  
 Asp Ala Ile Gly Ala Ala Ile Gly Val Ser Arg Phe Ala Ser Met Asn  
 35 40 45  
 Asn Leu Glu Ala Phe Ile Val Leu Asn Asp Ser Asp Ile Asp Pro Thr  
 50 55 60  
 Leu Arg Arg Val Met Asp Glu Ile Asp Lys Lys Pro Glu Leu Lys Glu  
 65 70 75 80  
 Arg Phe Val Thr Ser Asp Glu Ala Trp Asp Met Met Thr Ser Lys Thr  
 85 90 95  
 Thr Val Val Val Val Asp Thr His Lys Pro Glu Met Val Leu Asp Glu  
 100 105 110  
 Asn Val Leu Asn Lys Ala Asn Arg Lys Val Val Ile Asp His His Arg  
 115 120 125  
 Arg Gly Glu Thr  
 130

<210> 1641  
 <211> 376  
 <212> DNA  
 <213> Homo sapiens

<400> 1641  
 ttatcagcaa acgacagcag acaagagctc ctggggctct ggggaaatgc tgctgcctgc  
 60

tggccaaacg aactgatgga tgggctcttg gagtgggaga gactgggcag aagctgtgtg  
 120  
 ggggtgggtga ctcccaacct aaagaaccca ctgagacata tgtggcttcc ctcttcacc  
 180  
 ttcatgtcct ctttccgtct agatgctggc aaggggggac ttggtggaca aagagagcta  
 240  
 ctattcattc aggagctatg ttacaccagt cactttacat gtgccacttg ctctgggtta  
 300  
 aactgtgcct cccctcactc atatgttgaa gtcctaacct taactacctc agaatgggac  
 360  
 gttatttgga aaaaag  
 376

<210> 1642  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 1642  
 Met Asp Gly Leu Leu Glu Trp Glu Arg Leu Gly Arg Ser Cys Val Gly  
 1 5 10 15  
 Trp Val Thr Pro Asn Leu Lys Asn Pro Leu Arg His Met Trp Leu Pro  
 20 25 30  
 Ser Ser Thr Phe Ile Ala Ser Phe Arg Leu Asp Ala Gly Lys Gly Gly  
 35 40 45  
 Leu Gly Gly Gln Arg Glu Leu Leu Phe Ile Gln Glu Leu Cys Tyr Thr  
 50 55 60  
 Ser His Phe Thr Cys Ala Thr Cys Ser Gly Leu Asn Cys Ala Ser Pro  
 65 70 75 80  
 His Ser Tyr Val Glu Val Leu Thr Leu Thr Ser Glu Trp Asp Val  
 85 90 95  
 Ile Trp Lys Lys  
 100

<210> 1643  
 <211> 494  
 <212> DNA  
 <213> Homo sapiens

<400> 1643  
 aagcttccag aattccatag gaaccacagt gcccttcttg tacctcagtg aggtggagcc  
 60  
 gagtgtctga gagcaggtgc aggagaaggt gtgggctcca cctgggcctc tgaagccagg  
 120  
 ggccagaatc cccagatcta ggtccaagag ggggctccat gacctcccca tgctgctcct  
 180  
 ctgcttgat ccaggatata agaaaggagg ggcacacact gtgggggaac tctggggtcc  
 240  
 cctgtgtgca tcagcgagtc cggggtctgc cccaccagga tgcaaagggc ctggctgctc  
 300  
 cagcccatg ctcacagccc tataagtga cgatggcacc ctatatcacc taagcggggc  
 360  
 tgtgcctcct gaggtcttag ggacaccaga atgagcccc ctcggcggag tctggctctg  
 420

gggtgtgtgga gatgccacct gggacgggaa ccccaggtgc atggagcccc actgcagaca  
 480  
 ccatcccccg tgtg  
 494

<210> 1644  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 1644  
 Met Gly Leu Glu Gln Pro Gly Pro Leu His Pro Gly Gly Ala Asp Pro  
 1 5 10 15  
 Gly Leu Ala Asp Ala His Arg Gly Pro Gln Ser Ser Pro Thr Val Cys  
 20 25 30  
 Ala Pro Pro Phe Leu Tyr Pro Gly Ser Lys Gln Arg Ser Ser Met Gly  
 35 40 45  
 Arg Ser Trp Ser Pro Leu Leu Asp Leu Asp Leu Gly Ile Leu Ala Pro  
 50 55 60  
 Gly Phe Arg Gly Pro Gly Gly Ala His Thr Phe Ser Cys Thr Cys Ser  
 65 70 75 80  
 Gln Thr Leu Gly Ser Thr Ser Leu Arg Tyr Gln Lys Gly Ser Trp Val  
 85 90 95  
 Pro Met Glu Phe Trp Lys Leu  
 100

<210> 1645  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 1645  
 nnagatctgt cggataatgg ctttggctcc gacatggtga cactggtgct tgccatcggg  
 60  
 aggagccggg ctctgaaaca cgtggccctt ggaaggaaact tcaacgttcg gtgcaaggag  
 120  
 accctggacg atgtcctgca tcggatagcc cagctaatagc aggatgacga ctgtcctttg  
 180  
 cagtcactat ccgtggctga gtcgcggttg aagcaggggtg ccagcctcct gatccgggct  
 240  
 ttgggcacca atcctaaact gacagcgetg gatatcagtg gcaatgccat aggggatgct  
 300  
 ggggccaaga tgctagccaa ggctctacgc  
 330

<210> 1646  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 1646  
 Xaa Asp Leu Ser Asp Asn Gly Phe Gly Ser Asp Met Val Thr Leu Val  
 1 5 10 15  
 Leu Ala Ile Gly Arg Ser Arg Ser Leu Lys His Val Ala Leu Gly Arg

	20		25		30										
Asn	Phe	Asn	Val	Arg	Cys	Lys	Glu	Thr	Leu	Asp	Asp	Val	Leu	His	Arg
	35						40					45			
Ile	Ala	Gln	Leu	Met	Gln	Asp	Asp	Asp	Cys	Pro	Leu	Gln	Ser	Leu	Ser
	50					55					60				
Val	Ala	Glu	Ser	Arg	Leu	Lys	Gln	Gly	Ala	Ser	Ile	Leu	Ile	Arg	Ala
65					70					75				80	
Leu	Gly	Thr	Asn	Pro	Lys	Leu	Thr	Ala	Leu	Asp	Ile	Ser	Gly	Asn	Ala
			85					90					95		
Ile	Gly	Asp	Ala	Gly	Ala	Lys	Met	Leu	Ala	Lys	Ala	Leu	Arg		
	100							105					110		

&lt;210&gt; 1647

&lt;211&gt; 501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1647

```

aggcgcgtcg gtgatccgcg gcggcggcag cggcgcttcc tgctaggacc ggccggggcc
60
gtaccggagg ctcgggctcc accgaccctc ctcccacccc ctccactca ccctctgggc
120
cgcgactgcg cagggcgggg ccggccgaac catgggcccgc ggtgtgggct aagctggtgg
180
ccccggcttt agactggacc ccacaatggt tgcatagatg ttcaggcacg cgggagctga
240
ttacacacaa tgaatggggg caatgagagc agtggagcag acagagctgg gggccctgtg
300
gccacatctg tcccatcgg ctggcagcgc tgtgtgcgag aggggtgctgt gctctacatc
360
agtccaagtg gcacagagct gtcttccttg gagcaaaccg ggagctacct cctcagcgat
420
gggacctgca agtgcggtct ggagtgtcca cttaatgtcc ccaaggtttt caactttgac
480
cctttggccc cggtgacccc g
501

```

&lt;210&gt; 1648

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1648

Met	Asn	Gly	Gly	Asn	Glu	Ser	Ser	Gly	Ala	Asp	Arg	Ala	Gly	Gly	Pro
1			5					10					15		
Val	Ala	Thr	Ser	Val	Pro	Ile	Gly	Trp	Gln	Arg	Cys	Val	Arg	Glu	Gly
		20					25					30			
Ala	Val	Leu	Tyr	Ile	Ser	Pro	Ser	Gly	Thr	Glu	Leu	Ser	Ser	Leu	Glu
	35					40				45					
Gln	Thr	Arg	Ser	Tyr	Leu	Leu	Ser	Asp	Gly	Thr	Cys	Lys	Cys	Gly	Leu
	50				55				60						
Glu	Cys	Pro	Leu	Asn	Val	Pro	Lys	Val	Phe	Asn	Phe	Asp	Pro	Leu	Ala
65				70				75						80	
Pro	Val	Thr	Pro												

<210> 1649  
 <211> 441  
 <212> DNA  
 <213> Homo sapiens

<400> 1649  
 gcgtcggcag ctgaacgggt gctactggca atcggcgaac ccgaactgct ggatacgtcc  
 60  
 accaactcac ggttgctcgc catcttctcc aacaagggtga tccggcgcta tccggccttt  
 120  
 gaagacttcc acgggatgga agaatgcac gatcagatcg ttctgtatct ccgccacgcc  
 180  
 gcccaaggcc tggaagagaa gaaacagatc ctttacctgc tcggccccgt cggcggcggg  
 240  
 aaatcgctcc tggccgaaaa gctgaaacag ctgatcgaga aggtcccctt ctacgccatc  
 300  
 aagggtctgc cggctcttca gtcgcccctg gggttgttca acgccactga agacggcgcg  
 360  
 atcctcgagg aagacttcgg gattccacgg cgttacctga acaccatcat gtcgcccctg  
 420  
 gcgaccaagc gcctggccga a  
 441

<210> 1650  
 <211> 147  
 <212> PRT  
 <213> Homo sapiens

<400> 1650  
 Ala Ser Ala Ala Glu Arg Val Leu Leu Ala Ile Gly Glu Pro Glu Leu  
 1 5 10 15  
 Leu Asp Thr Ser Thr Asn Ser Arg Leu Ser Arg Ile Phe Ser Asn Lys  
 20 25 30  
 Val Ile Arg Arg Tyr Pro Ala Phe Glu Asp Phe His Gly Met Glu Glu  
 35 40 45  
 Cys Ile Asp Gln Ile Val Ser Tyr Phe Arg His Ala Ala Gln Gly Leu  
 50 55 60  
 Glu Glu Lys Lys Gln Ile Leu Tyr Leu Leu Gly Pro Val Gly Gly Gly  
 65 70 75 80  
 Lys Ser Ser Leu Ala Glu Lys Leu Lys Gln Leu Ile Glu Lys Val Pro  
 85 90 95  
 Phe Tyr Ala Ile Lys Gly Ser Pro Val Phe Glu Ser Pro Leu Gly Leu  
 100 105 110  
 Phe Asn Ala Thr Glu Asp Gly Ala Ile Leu Glu Glu Asp Phe Gly Ile  
 115 120 125  
 Pro Arg Arg Tyr Leu Asn Thr Ile Met Ser Pro Trp Ala Thr Lys Arg  
 130 135 140  
 Leu Ala Glu  
 145

<210> 1651  
 <211> 408



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1651

nccgcggatc cctccggcat cctgggtatc gctccctcga aggaatccgg agcccgactg  
 60  
 cgccgcgagc tttccgaacg cctcgaggat tacgccgcac aaacttccat ggtgcgttcc  
 120  
 gtacactccc tcgcattcgc gttgctgcgc acagcggccg aggaggagct gcgccttatt  
 180  
 accggtgcgg acnaagacgc cgttatccgc gagctgctca cgggccaagc agaagacgga  
 240  
 catggctcgt ggcccgcgga gatgcgcccc gcgtggaatn natgtgggct ttcgcggcag  
 300  
 ctgcgcgatt tccttttgcg ttccattgaa cgcggcctgg gaccgggtga cctagagagc  
 360  
 ctcggtgccg agcacggccg ccccatgtgg tctcgggcgg gtgaattc  
 408

&lt;210&gt; 1652

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1652

Xaa	Ala	Asp	Pro	Ser	Gly	Ile	Leu	Val	Ile	Ala	Pro	Ser	Lys	Glu	Ser
1				5					10					15	
Gly	Ala	Arg	Leu	Arg	Arg	Glu	Leu	Ser	Glu	Arg	Leu	Glu	Asp	Tyr	Ala
			20					25					30		
Ala	Gln	Thr	Ser	Met	Val	Arg	Ser	Val	His	Ser	Leu	Ala	Phe	Ala	Leu
			35				40					45			
Leu	Arg	Thr	Ala	Ala	Glu	Glu	Glu	Leu	Arg	Leu	Ile	Thr	Gly	Ala	Asp
			50			55					60				
Xaa	Asp	Ala	Val	Ile	Arg	Glu	Leu	Leu	Thr	Gly	Gln	Ala	Glu	Asp	Gly
65				70					75					80	
His	Gly	Ser	Trp	Pro	Ala	Glu	Met	Arg	Pro	Ala	Trp	Asn	Xaa	Cys	Gly
			85					90						95	
Leu	Ser	Arg	Gln	Leu	Arg	Asp	Phe	Leu	Leu	Arg	Ser	Ile	Glu	Arg	Gly
			100				105						110		
Leu	Gly	Pro	Gly	Asp	Leu	Glu	Ser	Leu	Gly	Ala	Glu	His	Gly	Arg	Pro
			115			120						125			
Met	Trp	Ser	Ala	Ala	Gly	Glu	Phe								
			130			135									

&lt;210&gt; 1653

&lt;211&gt; 398

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1653

ccagcctctc tccgaccgcg tcctttcttc ggccatacgg caaccaatgt cgcgtcacca  
 60  
 tcaccgcgcg acatggccat cgctccaccg gacgagttga gtgacaagat ccggtgcatt  
 120

ctgcgcaccc ttgaacctgg tgacagtgtg aaggagattc tcaacacgtc gcgtgtcgtc  
 180  
 ggcattgacg tccagagcag cctgcttatt gctggtgctc agcatctgta cttgttggac  
 240  
 gattacttcc agcgtccgaa cgggtgaaatc gtcaatgtct gggaagctcc gccacacgag  
 300  
 cgcgatgcct tgatcgtggc ggccggtgtc gcacaggtgg cacaaagcag cacaccgtg  
 360  
 cagatatggc gctggaaca gctccgactt tgtctaga  
 398

<210> 1654

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1654

Pro	Ala	Ser	Leu	Arg	Pro	Arg	Pro	Ser	Ser	Gly	His	Thr	Ala	Pro	Asn
1				5					10					15	
Val	Ala	Ser	Pro	Ser	Pro	Ala	His	Met	Ala	Ile	Ala	Pro	Pro	Asp	Glu
			20					25					30		
Leu	Ser	Asp	Lys	Ile	Arg	Cys	Ile	Leu	Arg	Thr	Leu	Glu	Pro	Gly	Asp
		35					40					45			
Ser	Val	Lys	Glu	Ile	Leu	Asn	Thr	Ser	Arg	Val	Val	Gly	Ile	Asp	Val
	50					55					60				
Gln	Ser	Ser	Leu	Leu	Ile	Ala	Gly	Ala	Gln	His	Leu	Tyr	Leu	Leu	Asp
65					70				75					80	
Asp	Tyr	Phe	Gln	Arg	Pro	Asn	Gly	Glu	Ile	Val	Asn	Val	Trp	Glu	Ala
			85					90					95		
Pro	Pro	His	Glu	Arg	Asp	Ala	Leu	Ile	Val	Ala	Ala	Gly	Val	Ala	Gln
			100					105					110		
Val	Ala	Gln	Ser	Ser	Thr	Pro	Val	Gln	Ile	Trp	Arg	Trp	Glu	Gln	Leu
		115					120					125			
Arg	Leu	Cys	Leu												
			130												

<210> 1655

<211> 1115

<212> DNA

<213> Homo sapiens

<400> 1655

nccctgacct gacctgtcct cgccatggcc gaggcgcct ccggcgccgg gggcacgtcc  
 60  
 ctggagggcg agcgtggcaa gagggccccg ccggagggcg agcctgcagc cccggcgctcc  
 120  
 ggagttcttg ataagctttt cggaaagcgg ctctctgcagg ctggtcgcta cctggtgtcc  
 180  
 cacaaggcgt ggatgaagac ggtgcctaca gagaactgcg acgtgctgat gaccttccca  
 240  
 gacacgaccg atgaccacac gctgctatgg ctgctgaacc acatccgct gggcattccc  
 300  
 gagctcatcg tgcaagtcgg ccaccaccgc cacacgcgtg cctacgcctt ctttgtcacc  
 360

gccacgtatg agagcctact ccgagggggcc gacgagctgg gtctgcgcaa agcagtgaag  
 420  
 gccgagtttg gcggggggcac ccgcggtctc tcctgcgagg aggactttat ctatgagaat  
 480  
 gtggagagcg agctacgctt ctccacctcc caggaacgcc agagcatcat ccgcttctgg  
 540  
 ctgcagaatt tgcgtgccaa gcaggagaaa gcactccaca acgtgcgctt cctggaggac  
 600  
 cagccaatca tcccggagct ggcagcacgt gggatcatcc agcagggtgt cctgtccac  
 660  
 gagcagcgta ttctgaaccg cctcatgaag tcatgggtgc aggccgtgtg tgaaaaccag  
 720  
 cctctagatg acatctgtga ttactttggt gtgaaaattg ccatgtactt cgctggctg  
 780  
 ggcttctaca cgctcggtat ggtataccca gctgtcttcg ggtctgtcct gtacacattc  
 840  
 acagaggctg atcagacaag ccgggatgtt tcctgcgtgg tctttgcctt cttcaacgtg  
 900  
 atctggtcga cgctgttcct ataggaatgg aagcgtatag gggctgagct gggatataat  
 960  
 tgggggacgc tggactcatc ctgggaagcc gtggaggagc cagccccca gttcagggtgc  
 1020  
 gtgcgacgta tcatcccat cactcgggcc gaggagtctt actaccgcc ctggaagcgg  
 1080  
 ctgctcttcc agctgcttgt tagcctccgc ctgtg  
 1115

&lt;210&gt; 1656

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1656

Met Ala Glu Ala Ala Ser Gly Ala Gly Gly Thr Ser Leu Glu Gly Glu  
 1 5 10 15  
 Arg Gly Lys Arg Pro Pro Pro Glu Gly Glu Pro Ala Ala Pro Ala Ser  
 20 25 30  
 Gly Val Leu Asp Lys Leu Phe Gly Lys Arg Leu Leu Gln Ala Gly Arg  
 35 40 45  
 Tyr Leu Val Ser His Lys Ala Trp Met Lys Thr Val Pro Thr Glu Asn  
 50 55 60  
 Cys Asp Val Leu Met Thr Phe Pro Asp Thr Thr Asp Asp His Thr Leu  
 65 70 75 80  
 Leu Trp Leu Leu Asn His Ile Arg Val Gly Ile Pro Glu Leu Ile Val  
 85 90 95  
 Gln Val Arg His His Arg His Thr Arg Ala Tyr Ala Phe Phe Val Thr  
 100 105 110  
 Ala Thr Tyr Glu Ser Leu Leu Arg Gly Ala Asp Glu Leu Gly Leu Arg  
 115 120 125  
 Lys Ala Val Lys Ala Glu Phe Gly Gly Gly Thr Arg Gly Phe Ser Cys  
 130 135 140  
 Glu Glu Asp Phe Ile Tyr Glu Asn Val Glu Ser Glu Leu Arg Phe Phe  
 145 150 155 160  
 Thr Ser Gln Glu Arg Gln Ser Ile Ile Arg Phe Trp Leu Gln Asn Leu

```

                165                170                175
Arg Ala Lys Gln Gly Glu Ala Leu His Asn Val Arg Phe Leu Glu Asp
                180                185                190
Gln Pro Ile Ile Pro Glu Leu Ala Ala Arg Gly Ile Ile Gln Gln Val
                195                200                205
Phe Pro Val His Glu Gln Arg Ile Leu Asn Arg Leu Met Lys Ser Trp
                210                215                220
Val Gln Ala Val Cys Glu Asn Gln Pro Leu Asp Asp Ile Cys Asp Tyr
225                230                235                240
Phe Gly Val Lys Ile Ala Met Tyr Phe Ala Trp Leu Gly Phe Tyr Thr
                245                250                255
Ser Ala Met Val Tyr Pro Ala Val Phe Gly Ser Val Leu Tyr Thr Phe
                260                265                270
Thr Glu Ala Asp Gln Thr Ser Arg Asp Val Ser Cys Val Val Phe Ala
                275                280                285
Leu Phe Asn Val Ile Trp Ser Thr Leu Phe Leu
                290                295

```

<210> 1657  
 <211> 333  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1657
tgtagaggct cgaggctcatc cggaccatgt ggtccaggac gcccccgctcc tccgggcccc
60
gcacggagac gcggcgtcag caccgacagc acgcagtctg tgagcctctg caggcagttc
120
ttggagcccc cggtcttccc gcgccgttcc agggggcggg cggcagctcg ggccgttact
180
tctcccaaaa ctgctccggg cagggcgct ccagcagcct ctgcatgaga cggaaggcat
240
ccacggggcc cgtgtaagtg gccactcct gcggcgacat tccacggcgg gggtagcctc
300
gcgtggacat ccgccctgc tagcatcagg gct
333

```

<210> 1658  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1658
Met Leu Ala Gly Ala Asp Val His Ala Arg Val Pro Pro Pro Trp Asn
1      5      10      15
Val Ala Ala Gly Val Gly His Leu His Gly Pro Arg Gly Cys Arg Pro
20     25     30
Ser His Ala Glu Ala Ala Gly Ala Pro Leu Pro Gly Ala Val Leu Gly
35     40     45
Glu Val Pro Ala Arg Ala Ala Arg Pro Leu Lys Arg Arg Gly Lys
50     55     60
Pro Ala Gly Ser Lys Asn Cys Leu Gln Arg Leu Thr Asp Cys Val Leu
65     70     75     80
Ser Val Leu Thr Pro Arg Leu Arg Ala Gly Pro Gly Gly Arg Gly Arg

```

Pro Gly Pro His Gly Pro Asp Asp Leu Glu Pro Leu  
 85 90 95  
 100 105

<210> 1659  
 <211> 382  
 <212> DNA  
 <213> Homo sapiens

<400> 1659  
 nnaagcttat ttgttattac taatattttc cgtgaccaga tgggcccgtta tggtgagatt  
 60  
 tacacaactt acaagatgat tttggatgct attcgttaagg tgcctactgc cactgttctc  
 120  
 cttaatggag acagtccact tttctacaag ccagctattc caaatcctgt acagtatttt  
 180  
 ggttttgact tggagaaagg cccagcccaa ctggctcact ataataccga aggaattctc  
 240  
 tgtcccgcact gccaaaggcat cctcaaatat gagcataata cctatgcaaa cttggggcgcc  
 300  
 tatatctgtg aagactgtgg atgtaaacgt cctgatctcg actatcgctt gacagaactg  
 360  
 gttgagttaa ccaacaatcg cn  
 382

<210> 1660  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 1660  
 Xaa Ser Leu Phe Val Ile Thr Asn Ile Phe Arg Asp Gln Met Gly Arg  
 1 5 10 15  
 Tyr Gly Glu Ile Tyr Thr Thr Tyr Lys Met Ile Leu Asp Ala Ile Arg  
 20 25 30  
 Lys Val Pro Thr Ala Thr Val Leu Leu Asn Gly Asp Ser Pro Leu Phe  
 35 40 45  
 Tyr Lys Pro Ala Ile Pro Asn Pro Val Gln Tyr Phe Gly Phe Asp Leu  
 50 55 60  
 Glu Lys Gly Pro Ala Gln Leu Ala His Tyr Asn Thr Glu Gly Ile Leu  
 65 70 75 80  
 Cys Pro Asp Cys Gln Gly Ile Leu Lys Tyr Glu His Asn Thr Tyr Ala  
 85 90 95  
 Asn Leu Gly Ala Tyr Ile Cys Glu Asp Cys Gly Cys Lys Arg Pro Asp  
 100 105 110  
 Leu Asp Tyr Arg Leu Thr Glu Leu Val Glu Leu Thr Asn Asn Arg  
 115 120 125

<210> 1661  
 <211> 524  
 <212> DNA  
 <213> Homo sapiens

<400> 1661

acgcgtcgat gatcatggag aagacgcggg ccggctcctt gcctgtgacc ttcttgata  
 60  
 gctgcgggta gtagagctcc aggctctcga ggaaggccac gtagcccttg tggccgggtcc  
 120  
 gctgcaggat gtccaggagc acaccactt tccgtttgcg gatgaccagg ttgggggtcgc  
 180  
 tgagcacctg ctctcatca tcagggttca ggaccttgcg ctgccgcagg taagggtgtga  
 240  
 tgcgtgaggg gtcgatgacc gaggtgagcg tcaccggaa gccctccagg acgttccagc  
 300  
 actcgtcatc gttctcgtag tccgacatgg cctcagcagg caggctgggg agtgtggggc  
 360  
 agtgctgaga gcgatgccgg ctctgcccc caccggggc cagctccac tccttctcag  
 420  
 acgctgggccc agggctctcg tcagggcacg gagggggatc agcccaggcg catccaggag  
 480  
 aggtgcccag ctccgtgtcc catcccacgc ttgatcgctg catg  
 524

<210> 1662

<211> 174

<212> PRT

<213> Homo sapiens

<400> 1662

Met	Gln	Arg	Ser	Ser	Val	Gly	Trp	Asp	Thr	Glu	Leu	Gly	Thr	Ser	Pro
1				5					10					15	
Gly	Cys	Ala	Trp	Ala	Asp	Pro	Pro	Arg	Cys	Pro	Asp	Glu	Ser	Pro	Gly
		20						25				30			
Pro	Ala	Ser	Glu	Lys	Glu	Trp	Glu	Leu	Gly	Pro	Gly	Gly	Gly	Arg	Ser
		35				40					45				
Arg	His	Arg	Ser	Gln	His	Cys	Pro	Thr	Leu	Pro	Ser	Leu	Pro	Ala	Glu
	50				55				60						
Ala	Met	Ser	Asp	Tyr	Glu	Asn	Asp	Asp	Glu	Cys	Trp	Asn	Val	Leu	Glu
65				70					75					80	
Gly	Phe	Arg	Val	Thr	Leu	Thr	Ser	Val	Ile	Asp	Pro	Ser	Arg	Ile	Thr
		85						90						95	
Pro	Tyr	Leu	Arg	Gln	Cys	Lys	Val	Leu	Asn	Pro	Asp	Asp	Glu	Glu	Gln
		100						105					110		
Val	Leu	Ser	Asp	Pro	Asn	Leu	Val	Ile	Arg	Lys	Arg	Lys	Val	Gly	Val
		115				120						125			
Leu	Leu	Asp	Ile	Leu	Gln	Arg	Thr	Gly	His	Lys	Gly	Tyr	Val	Ala	Phe
	130				135						140				
Leu	Glu	Ser	Leu	Glu	Leu	Tyr	Tyr	Pro	Gln	Leu	Tyr	Lys	Lys	Val	Thr
145				150						155				160	
Gly	Lys	Glu	Pro	Ala	Arg	Val	Phe	Ser	Met	Ile	Ile	Asp	Ala		
		165						170							

<210> 1663

<211> 321

<212> DNA

<213> Homo sapiens

<400> 1663

nnagtacttg tcatgattac gcctagtttg ggtatctatt tctctcagcg ttctcagatc  
 60  
 tcccgaaccc aagacgacga ggctcggaca cgcgcttcta tctcgaccct tcaagacgag  
 120  
 gtcaagaggt ggcacgatcc cgactacgtc cgtgctcagg cgcgctccca gctcggctgg  
 180  
 gtgatgccgg gcgaaactgg gtatcaggtc attggagaaa acggtaaggt cattggatcg  
 240  
 acgacttctt tggacgaaaa agatccggcg agtgaagcca gcgctgacgc tcggtggtgg  
 300  
 caagaggctt gcggatcagt c  
 321

<210> 1664

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1664

Xaa	Val	Leu	Val	Met	Ile	Thr	Pro	Ser	Leu	Gly	Ile	Tyr	Phe	Ser	Gln
1				5					10					15	
Arg	Ser	Gln	Ile	Ser	Arg	Thr	Gln	Asp	Asp	Glu	Ala	Arg	Thr	Arg	Ala
		20						25					30		
Ser	Ile	Ser	Thr	Leu	Gln	Asp	Glu	Val	Lys	Arg	Trp	His	Asp	Pro	Asp
		35				40						45			
Tyr	Val	Arg	Ala	Gln	Ala	Arg	Ser	Gln	Leu	Gly	Trp	Val	Met	Pro	Gly
	50					55				60					
Glu	Thr	Gly	Tyr	Gln	Val	Ile	Gly	Glu	Asn	Gly	Lys	Val	Ile	Gly	Ser
65				70					75					80	
Thr	Thr	Ser	Leu	Asp	Glu	Lys	Asp	Pro	Ala	Ser	Glu	Ala	Ser	Ala	Asp
			85					90						95	
Ala	Arg	Trp	Trp	Gln	Glu	Ala	Cys	Gly	Ser	Val					
			100					105							

<210> 1665

<211> 431

<212> DNA

<213> Homo sapiens

<400> 1665

gcttccgaac tcatcaagaa gctcaagagg tataaaatgg ttttgcgctc taccggcggc  
 60  
 ggcccgaacta tctccggtgg tgaagtactc atgcaacgcg cttttgcgtg gaacttgctc  
 120  
 atgagtgccta agtcgatggg cattcatacc tgtatcgata cctccgggtt tttgggggct  
 180  
 gcggcaacag atgacttttt agagtctgtt gatttgggtg tgctcgacgt caaatcggga  
 240  
 gatgaagaaa tctaccgtgc cctcaccggc agagcggtgc aacctaccat cgattttggt  
 300  
 gatcgtctca ccgcgctcgg taaagaaatc tggattcggg tcgttggtgg ccccgatag  
 360  
 accgactcgg tagagaacgt ggaaaagggt gccgatatcg tccgcagatg gcgcaccgct  
 420

gtttcacgcg t  
431

<210> 1666  
<211> 143  
<212> PRT  
<213> Homo sapiens

<400> 1666  
Ala Ser Glu Leu Ile Lys Lys Leu Lys Arg Tyr Lys Met Val Leu Arg  
1 5 10 15  
Ser Thr Gly Gly Gly Pro Thr Ile Ser Gly Gly Glu Val Leu Met Gln  
20 25 30  
Arg Ala Phe Ala Trp Asn Leu Leu Met Ser Ala Lys Ser Met Gly Ile  
35 40 45  
His Thr Cys Ile Asp Thr Ser Gly Phe Leu Gly Ala Ala Ala Thr Asp  
50 55 60  
Asp Phe Leu Glu Ser Val Asp Leu Val Leu Leu Asp Val Lys Ser Gly  
65 70 75 80  
Asp Glu Glu Ile Tyr Arg Ala Leu Thr Gly Arg Ala Leu Gln Pro Thr  
85 90 95  
Ile Asp Phe Gly Asp Arg Leu Thr Ala Leu Gly Lys Glu Ile Trp Ile  
100 105 110  
Arg Phe Val Val Val Pro Gly Tyr Thr Asp Ser Val Glu Asn Val Glu  
115 120 125  
Lys Val Ala Asp Ile Val Arg Arg Trp Arg Thr Ala Val Ser Arg  
130 135 140

<210> 1667  
<211> 370  
<212> DNA  
<213> Homo sapiens

<400> 1667  
tccgctgaga ccagcgttgg tgacttccca ggtgagactg tccgcaccat ggccaagatc  
60  
gttgagtcta ctgaggcccc tggcttggac aagatcgcca agatcgactg ggatccgcac  
120  
accaccagtg gcatcatgtc gaaggcagct gctgagatcg ctgagcgcgc cgaggccaag  
180  
ttcatcgtgg cctttaccaa gtccggtgac accgcccgtc gtatcgctcg tctgcgtccg  
240  
agcaccgccg tcatcgtttt cacctctgat gagaccacga ccaagaccct cgcctgggctc  
300  
tggggcgctc acgccgtcgt taccocgggtg tttaagaatg cggaggagct gtaccgctgg  
360  
gttaacgcgt  
370

<210> 1668  
<211> 123  
<212> PRT  
<213> Homo sapiens



&lt;400&gt; 1668

```

Ser Ala Glu Thr Ser Val Gly Asp Phe Pro Gly Glu Thr Val Arg Thr
 1           5           10           15
Met Ala Lys Ile Val Glu Ser Thr Glu Ala Arg Gly Leu Asp Lys Ile
 20           25           30
Ala Lys Ile Asp Trp Asp Pro His Thr Thr Ser Gly Ile Met Ser Lys
 35           40           45
Ala Ala Ala Glu Ile Ala Glu Arg Ala Glu Ala Lys Phe Ile Val Ala
 50           55           60
Phe Thr Lys Ser Gly Asp Thr Ala Arg Arg Ile Ala Arg Leu Arg Pro
 65           70           75           80
Ser Thr Pro Leu Ile Val Phe Thr Ser Asp Glu Thr Thr Thr Lys Thr
 85           90           95
Leu Ala Trp Val Trp Gly Ala His Ala Val Val Thr Pro Val Phe Lys
100           105           110
Asn Ala Glu Leu Tyr Arg Trp Val Asn Ala
115           120

```

&lt;210&gt; 1669

&lt;211&gt; 1491

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1669

```

ggatcctgca gtggtgatct gtcacgtca cgtcacagaa ctgaacatgg aaatgaacaa
60
cgaaaaactcc acccccttct caaacgagtt attcctagct ccgccccag tccttgctc
120
tcccagcctt ggtggttaatt agcttgaaag tgggaacgag agtgcggtcc gcaaagaaag
180
gacttctggt tagacactga aatacaaaaca gactgccaac gagctctggg caaagctgcc
240
ccgtcttctt ttttcgaaag accctcaaaa actgccttct cttctgctac caaaacttgg
300
gccctagaaa gtggctgctgg agtggagcag atggacatca ctgagaatgg tagaggaggg
360
gctgtgtttt ctgaggggga gtcattggcag cttgtgctgg gggccaggaa gggaaaaaac
420
caatctggca ttcaggttgt ggaaggcaaa gtgaaacaag aagtcatttg ggaaaatatt
480
atattataaa cacatagaat aatatgtaca cgctcatata catcccaaag agaagcctca
540
aggagtccg tttcttctca aaagaaactt cactatgata aagcattcct atagtgggaa
600
ttaactacaa tgaaataatt taacaatttc atttatgcta tatctgtgtc cactacagag
660
tctacggtga aggtgtgtg gagcgagtgt gtctagtga ctgaacacc aacgcgttct
720
tcaaaaatag gcaatgacct gtttttttct attcacattt acaatagcta cacagtgatg
780
aaacgcagac tgaaaaatca aatggcagga cgatggaact gtcgtcaagg ttctcagact
840
tgtggttct gcacctgtta tacttttggg tacgagttag ctccacttag cttcgtaaag
900

```

attagaaatt tccatgaaac acttaccac atataaatc tgtgtaaagc tttatttttt  
 960  
 tccccaccta ctttaatttt ttttaaaaag tgaaataaga ggaaaaactc ttataaaata  
 1020  
 taagggttaa catacgagag agcgaggaac acccggagg ctgccgtgc gtgtggcttc  
 1080  
 atgtttctgt gctacatgag tctagtgtcc tcatcttcca ttgtgacaac ccttctcccc  
 1140  
 ccatcacact gtcaatgagc tctaggcaaa gctgccccgt ttgcttttaa cctaagggat  
 1200  
 gctgtggttt gggtgactac atttgactac caccactgaa ggcggcggac gtctgaagcg  
 1260  
 gctggatacc gcaacgatgg aaaatcaggc gaggtactag cgtggagggc cgggctgcc  
 1320  
 ggtcaaggtc gtctgggttc tcaggagcca gtctgtgcc cagaaccatc ggcagctgcc  
 1380  
 ttcgtaaggc acctcggtct ggcattcgga aaaccacccc atcttgccag agtccttgg  
 1440  
 tccttgggta gcaaaagccg tatgcgatct aaatcaagct ttcaatcatg a  
 1491

<210> 1670

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1670

Met	Pro	Asp	Trp	Phe	Phe	Pro	Phe	Leu	Ala	Pro	Ser	Thr	Ser	Cys	His
1			5					10						15	
Asp	Ser	Pro	Ser	Glu	Asn	Thr	Ala	Pro	Pro	Leu	Pro	Phe	Ser	Val	Met
			20					25					30		
Ser	Ile	Cys	Ser	Thr	Pro	Gln	Pro	Leu	Ser	Arg	Ala	Gln	Val	Leu	Val
		35				40						45			
Ala	Glu	Gly	Lys	Ala	Val	Phe	Glu	Gly	Leu	Ser	Lys	Glu	Asp	Gly	
	50					55				60					
Ala	Ala	Leu	Pro	Arg	Ala	Arg	Trp	Gln	Ser	Val	Cys	Ile	Ser	Val	Ser
65				70					75					80	
Asn	Gln	Lys	Ser	Phe	Leu	Cys	Gly	Pro	His	Ser	Arg	Ser	His	Phe	Gln
				85				90						95	
Ala	Asn	Tyr	His	Gln	Gly	Trp	Glu	Arg	Gln	Gly	Leu	Gly	Ala	Glu	Leu
			100					105					110		
Gly	Ile	Thr	Arg	Leu	Arg	Arg	Gly	Trp	Ser	Phe	Arg	Cys	Ser	Phe	Pro
		115					120					125			
Cys	Ser	Val	Leu												
			130												

<210> 1671

<211> 432

<212> DNA

<213> Homo sapiens

<400> 1671

gcgcgcggg gcgggaggac gccagtcgtc ttcccgcgcc tcaccacgac acgaccatta  
 60

tcgcgacgaa ggaagcccat ggctgaaacc acatcgccgg cacagcggaa acccacggcg  
 120  
 gcateccgca tgaagccggt gtcgcgggtc ggggacacga ttttcgctgg cgcctcgtcg  
 180  
 gttattgccca tagccctggc cgtcatcgtc atcctgatgt tcgtcttcct catgaagacg  
 240  
 gcagccccga cgttggtggc taacaccgat aactttttca cgtcccgggc ttggacaacg  
 300  
 gatcagaacc cgccggcctt tggatccag gccctgctat ggacgacagt catctcatcc  
 360  
 ctgcttgccc tgctcatcgc agtgccgctc tcggtgggca tcgctctgtt tatcaccag  
 420  
 ctcgcaccta gg  
 432

<210> 1672

<211> 144

<212> PRT

<213> Homo sapiens

<400> 1672

Ala	Arg	Arg	Gly	Gly	Arg	Thr	Pro	Val	Val	Phe	Pro	Pro	Leu	Thr	Thr
1			5					10					15		
Thr	Arg	Pro	Leu	Ser	Arg	Arg	Arg	Lys	Pro	Met	Ala	Glu	Thr	Thr	Ser
		20						25					30		
Pro	Ala	Gln	Arg	Lys	Pro	Thr	Ala	Ala	Ser	Arg	Met	Lys	Pro	Val	Ser
		35					40					45			
Arg	Val	Gly	Asp	Thr	Ile	Phe	Ala	Gly	Ala	Ser	Ser	Val	Ile	Ala	Ile
	50					55					60				
Ala	Leu	Ala	Val	Ile	Val	Ile	Leu	Met	Phe	Val	Phe	Leu	Met	Lys	Thr
65					70				75					80	
Ala	Ala	Pro	Thr	Leu	Leu	Ala	Asn	Thr	Asp	Asn	Phe	Phe	Thr	Ser	Arg
				85					90					95	
Ala	Trp	Thr	Thr	Asp	Gln	Asn	Pro	Pro	Ala	Phe	Gly	Ile	Gln	Ala	Leu
		100						105					110		
Leu	Trp	Thr	Thr	Val	Ile	Ser	Ser	Leu	Leu	Ala	Leu	Leu	Ile	Ala	Val
		115					120					125			
Pro	Leu	Ser	Val	Gly	Ile	Ala	Leu	Phe	Ile	Thr	Gln	Leu	Ala	Pro	Arg
	130						135					140			

<210> 1673

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1673

tcgcgagcac actccagcct ctggggcgctc tgccagggcc tctgtgtttt gatatactct  
 60  
 gacctggcag tgaagctgct gatgaatgca cgacaaagac cagtttgctc cgtaacccca  
 120  
 ggctcccagc gtctttttcca tgagccaaag gcctggctct ggaggggggt gccctgcagc  
 180  
 tctgctggcc ttcttccagg ggagttcatt gctgggggtg gccctgcagg gacctccact  
 240

gtgctgggga ggggaagaag aaggatgcaa cagggggagg ggagaatttg agaaaatagg  
 300  
 atgcaaattc tccacttggt aataaagaaa tagagagcca ttgctaagaa ctatgtttac  
 360  
 gcaggggttag tgctgggacc cagaaccagt caactggttt t  
 401

<210> 1674  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 1674  
 Met Ala Leu Tyr Phe Phe Ile His Lys Trp Arg Ile Cys Ile Leu Phe  
 1 5 10 15  
 Ser Gln Ile Leu Pro Ser Pro Cys Cys Ile Leu Leu Leu Pro Leu Pro  
 20 25 30  
 Ser Thr Val Glu Val Pro Ala Gly Pro Pro Pro Ala Met Asn Ser Pro  
 35 40 45  
 Gly Arg Arg Pro Ala Glu Leu Gln Gly Thr Pro Leu Gln Asp Gln Ala  
 50 55 60  
 Phe Gly Ser Trp Lys Arg Arg Trp Glu Pro Gly Val Thr Glu Gln Thr  
 65 70 75 80  
 Gly Leu Cys Arg Ala Phe Ile Ser Ser Phe Thr Ala Arg Ser Glu Tyr  
 85 90 95  
 Ile Lys Thr Gln Arg Pro Trp Gln Thr Pro Gln Arg Leu Glu Cys Ala  
 100 105 110  
 Arg

<210> 1675  
 <211> 500  
 <212> DNA  
 <213> Homo sapiens

<400> 1675  
 gccggcgac ccacctggga cgtggtgaaa tcggcaaac tcacctcttt agctacctgc  
 60  
 gcgccaaccg cacgggcagc ctcccacacg ccctctagag cgctgctgga cagaatgggt  
 120  
 tgattgtttg gcatgctctc aggatacccg tttagccagg aaacaccggt aggcttgcta  
 180  
 ctatgcgagc agccgacgca cgggtagagg gaattccac cacagtcctt cgcactccac  
 240  
 ccgcacacgc cctgggaacc gtcacccgcg gtaccacagg gtcaatcggc tccgcaaagt  
 300  
 cgaccgctgg atgtgccacc accccgcnc a tccgcagtgc gctccgtaac gccgtctgca  
 360  
 acaccgtccc ctccgtatct gccgacacct gtgccaacac ttgtaccgat gcatgcaccg  
 420  
 atgcagcaac aggcgctccg ctccgtatcg atctgggata cggcgccgcc ccctggacca  
 480  
 ctgttgagat ggctacgcgt  
 500

<210> 1676  
 <211> 97  
 <212> PRT  
 <213> Homo sapiens

<400> 1676  
 Arg Glu Phe Pro Pro Gln Ser Leu Ala Leu His Pro His Thr Pro Trp  
 1 5 10 15  
 Glu Pro Ser Pro Ala Val Pro Pro Gly Gln Ser Ala Pro Gln Met Arg  
 20 25 30  
 Pro Leu Asp Val Pro Pro Pro Arg Xaa Ser Ala Val Arg Ser Val Thr  
 35 40 45  
 Pro Ser Ala Thr Pro Ser Pro Pro Tyr Leu Pro Thr Pro Val Pro Thr  
 50 55 60  
 Leu Val Pro Met His Ala Pro Met Gln Gln Gln Ala Leu Arg Ser Leu  
 65 70 75 80  
 Ser Ile Trp Asp Thr Ala Pro Pro Pro Gly Pro Leu Leu Arg Trp Leu  
 85 90 95  
 Arg

<210> 1677  
 <211> 631  
 <212> DNA  
 <213> Homo sapiens

<400> 1677  
 nntcatgatt tcctcaatga tgccaagggtg atggaggccg gctatacctg ggtgcagggtg  
 60  
 gatttgccgc gtacgggtgc ttctactggg tgtttgngac tggaatgggc cncgggggag  
 120  
 cagcaggatg ttgtgaccgc cgtggaatgg gcggcggtac agccgtgggc gaatggtcgg  
 180  
 gtggggcttt tcggtaaatc ctacgatggg gggacggggc cttattgctg caggtaatca  
 240  
 gccgcggggg ttggctgctg tgggtggcgca ggagccagct atggagccct acacttacct  
 300  
 gtataacaat gaggtccttt actacaacgc tattggtacg agcctttctt atgatgagat  
 360  
 tgctgcctcc cccggccgtg tccttcacga cactcccgaa tatatgaaga acagtgtcta  
 420  
 cgagggtggc caccgcgatt gcctgtccga caatttgcgt aattccttag accccatccg  
 480  
 tagccacaaa taatggggcg gatcggtctt tccctcacca agacgcataa tttcccccg  
 540  
 gcccttgttt atttccgctg gccttattga ggacaatacg gagcctgatg gtttgggtgga  
 600  
 attgttgaag gaccgtaagg ctccgacgcg t  
 631

<210> 1678  
 <211> 78  
 <212> PRT

<213> Homo sapiens

<400> 1678

```

Xaa His Asp Phe Leu Asn Asp Ala Lys Val Met Glu Ala Gly Tyr Thr
 1           5           10           15
Trp Val Gln Val Asp Leu Arg Gly Thr Gly Ala Ser Thr Gly Cys Leu
      20           25           30
Xaa Leu Glu Trp Ser Xaa Gly Glu Gln Gln Asp Val Val Thr Ala Val
      35           40           45
Glu Trp Ala Ala Val Gln Pro Trp Ser Asn Gly Arg Val Gly Leu Phe
      50           55           60
Gly Lys Ser Tyr Asp Gly Gly Thr Gly Ser Tyr Cys Cys Arg
      65           70           75

```

<210> 1679

<211> 531

<212> DNA

<213> Homo sapiens

<400> 1679

```

nctacttaga gcaaaggtag gaaaagaagg cagctaggcg tggctctcat tccttcccac
60
agaatggatt ataagtcgag cctgatccag gatgggaatc ccatggagaa cttggagaag
120
cagctgatct gccctatctg cctggagatg tttaccaagc cagtgggtcat cttgccgtgc
180
cagcacaacc tgtgccggaa gtgtgccaat gacatcttcc aggctgcaaa tccctactgg
240
accagccggg gcagctcagt gtccatgtct ggaggccgtt tccgctgccc tacctgccgc
300
cacgaggtga tcattggatcg tcacggagtg tacggcctgc agaggaacct gctggtgagg
360
aacatcatcg acatctacaa acaggagtgc tccagtcggc cgctgcagaa gggcagtcac
420
cccatgtaca aggagcacga agatgagaaa atcaacatct actgtctcac gtgtgaggtg
480
cccacctgct ccattgtgcaa ggtgtttggg atccacaagg cctgcgaggt g
531

```

<210> 1680

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1680

```

Met Glu Asn Leu Glu Lys Gln Leu Ile Cys Pro Ile Cys Leu Glu Met
 1           5           10           15
Phe Thr Lys Pro Val Val Ile Leu Pro Cys Gln His Asn Leu Cys Arg
      20           25           30
Lys Cys Ala Asn Asp Ile Phe Gln Ala Ala Asn Pro Tyr Trp Thr Ser
      35           40           45
Arg Gly Ser Ser Val Ser Met Ser Gly Gly Arg Phe Arg Cys Pro Thr
      50           55           60
Cys Arg His Glu Val Ile Met Asp Arg His Gly Val Tyr Gly Leu Gln

```

```

65          70          75          80
Arg Asn Leu Leu Val Glu Asn Ile Ile Asp Ile Tyr Lys Gln Glu Cys
          85          90          95
Ser Ser Arg Pro Leu Gln Lys Gly Ser His Pro Met Tyr Lys Glu His
          100          105          110
Glu Asp Glu Lys Ile Asn Ile Tyr Cys Leu Thr Cys Glu Val Pro Thr
          115          120          125
Cys Ser Met Cys Lys Val Phe Gly Ile His Lys Ala Cys Glu Val
          130          135          140

```

&lt;210&gt; 1681

&lt;211&gt; 396

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1681

```

gagttccaca actgcaggac agatgacaag acgttccaat gtgagatgtg tttcagattc
60
ttttccacca acagcaacct ctccaagcac aagaagaagc acggcgacaa gaagtttgcc
120
tgtgaggtct gcagcaagat gttctaccgc aaggacgtca tgctggacca ccagcgccgg
180
cacnctggaa ggagtgcggc gagtgaagcg nnagaggacc tggaggccgg tggggagaac
240
ctggtcctgtt acaagaagga gccttcctggg tgcccgggtgt gtggcaaggt gttctcctgc
300
cggagcaata tgaacaagca cctgtctacc caccggcgaca agaagtacac ctgcgagatc
360
tgccggcgca agttcttccg cgtggatgtg ctcagg
396

```

&lt;210&gt; 1682

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1682

```

Glu Phe His Asn Cys Arg Thr Asp Asp Lys Thr Phe Gln Cys Glu Met
1      5      10      15
Cys Phe Arg Phe Phe Ser Thr Asn Ser Asn Leu Ser Lys His Lys Lys
20     25     30
Lys His Gly Asp Lys Lys Phe Ala Cys Glu Val Cys Ser Lys Met Phe
35     40     45
Tyr Arg Lys Asp Val Met Leu Asp His Gln Arg Arg His Xaa Gly Arg
50     55     60
Ser Ala Ala Ser Glu Ala Xaa Glu Asp Leu Glu Ala Gly Gly Glu Asn
65     70     75     80
Leu Val Arg Tyr Lys Lys Glu Pro Ser Gly Cys Pro Val Cys Gly Lys
85     90     95
Val Phe Ser Cys Arg Ser Asn Met Asn Lys His Leu Leu Thr His Gly
100    105    110
Asp Lys Lys Tyr Thr Cys Glu Ile Cys Gly Arg Lys Phe Phe Arg Val
115    120    125
Asp Val Leu Arg

```

130

<210> 1683  
 <211> 676  
 <212> DNA  
 <213> Homo sapiens

<400> 1683  
 nncggccgga cagggtcccga gcagccccgc ccaacatgga cccagacccc caggcgggcg  
 60  
 tgcaggtggg catgcgggtg gtgcgcggcg tggaccggaa gtggggccag caggacggcg  
 120  
 gcgagggcgg cgtgggcacg gtggtggagc ttggccgcca cggcagcccc tcgacacccg  
 180  
 accgcacagt ggtcgtgcag tgggaccagg gcacgcgcac caactaccgc gccggctacc  
 240  
 agggcgcgca cgacctgctg ctgtacgaca acgcccagat cggcgtccgg caccccaaca  
 300  
 tcactgtga ctgctgcaag aagcacgggc tgcgggggat gcgctggaag tgccgtgtgt  
 360  
 gcctggacta cgacctctgc acgcagtgtc acatgcacaa caagcatgag ctcgcccacg  
 420  
 ccttcgaccg ctacgagacc gctcactcgc gccctgtcac actgagtccc cgccagggcc  
 480  
 tcccaggat cccactaagg ggcattctcc agggagcgaa ggtggtgcga ggccccgact  
 540  
 gggagtgggg ctcacaggat ggtgagtggg ggcagagggg cggggtcagg gctgggctgt  
 600  
 ggctggctca tggtctagcc ttagcctgct gggggggcct ctttccccag gaggggaagg  
 660  
 aaaccggggc gccgga  
 676

<210> 1684  
 <211> 154  
 <212> PRT  
 <213> Homo sapiens

<400> 1684  
 Xaa Gly Arg Thr Gly Pro Glu Gln Pro Arg Pro Thr Trp Thr Gln Thr  
 1 5 10 15  
 Pro Arg Arg Ala Cys Arg Trp Ala Cys Gly Trp Cys Ala Ala Trp Thr  
 20 25 30  
 Gly Ser Gly Ala Ser Arg Thr Ala Ala Arg Ala Ala Trp Ala Arg Trp  
 35 40 45  
 Trp Ser Leu Ala Ala Thr Ala Ala Pro Arg His Pro Thr Ala Gln Trp  
 50 55 60  
 Ser Cys Ser Gly Thr Arg Ala Arg Ala Pro Thr Thr Ala Pro Ala Thr  
 65 70 75 80  
 Arg Ala Arg Thr Thr Cys Cys Cys Thr Thr Pro Arg Ser Ala Ser  
 85 90 95  
 Gly Thr Pro Thr Ser Ser Val Thr Ala Ala Arg Ser Thr Gly Cys Gly  
 100 105 110  
 Gly Cys Ala Gly Ser Ala Val Cys Ala Trp Thr Thr Thr Ser Ala Arg



```

      115              120              125
Ser Ala Thr Cys Thr Thr Ser Met Ser Ser Pro Thr Pro Ser Thr Ala
      130              135              140
Thr Arg Pro Leu Thr Arg Ala Leu Ser His
      145              150

<210> 1685
<211> 2740
<212> DNA
<213> Homo sapiens

<400> 1685
ngaggaggag cggcgggcgg ctccggggaa agggaggggg gcgctccgca gccgcccgcg
60
cccaggggct ggcgagggaa aggcgtacgc gctcagcaga gggcgggcag cggcggggag
120
ggggcctccc cttctccatc ctctcttctt gcgggcaaaa ccccaggaaac cggcagcaga
180
aactccgga gcgcggttgc ggggggcggc agcgggtggtg gagggagcta ctggaaagaa
240
ggatgtctgc agtctgagct catccagtcc catctcaaga aggagcgggc ggcagcggcg
300
gcggccgcgg ctcagatgca cgctaagaac ggcgggcgga gcagtagccg cagctccccg
360
gtgtctggcc cccctgccgt ttgcgagacc ctggcgcgtc cctccgcctc cccaatggcg
420
gcggcgggcg agggccccc gacagagcga gagggcagcg cgagcggcg gggcatgcag
480
gcggcagcgc ccccttcgtc gcagccgcac ccgcagcagc tccaagagca ggaagaaatg
540
caagaggaga tggagaagct gcgagaggaa aacgagactc tcaagaacga gatcgatgag
600
ctgagaaccg agatggacga gatgaggagc actttcttcg aggaggatgc ctgtcaactg
660
caggaaatgc gccacgagtt ggagagagcc aacaaaaact gccggatcct gcagtaccgc
720
ctccgcaaag ccgagcgcaa aaggctccgc tacgcccaga ccggggaaat cgacggggag
780
ctgttgcgca gcctggagca ggacctcaag gttgcaaagg atgtatctgt gagacttcac
840
catgaattag aaaatgtgga agaaaagaga acaacaacag aagatgaaaa tgagaaactg
900
aggcaacagc tcatagaagt tgaaattgca aagcaagctt tacagaatga actggaaaaa
960
atgaaagagt tacccttaaa aagaagagga agcaaagatt tgccaaaatc tgaaaaaaag
1020
gctcaacaga ctcccacaga ggaggacaat gaagatctga agtgccagct gcagtttgtt
1080
aaggaaagaag ccgctttgat gagaaagaaa atggccaaga ttgataaaga aaaggacaga
1140
tttgaacacg agctccagaa gtacagatcc ttttatgggg atctggacag tcctttgccc
1200
aaaggagaag ccggaggccc tcccagcact agggaggccg agctcaagct acggctaagg
1260

```

ctggtggagg aagaagccaa catcctgggc aggaaaatcg tcgaactgga ggtggagaac  
1320  
agaggcctga aggcggaact ggacgacctt aggggcgatg acnnttcaac ggctcggcca  
1380  
accgctcat gaggnagca gagcgaatcc ctgtcggagc tgcggcagca cctgcagctg  
1440  
gtggaagacg agacggagct gctgcggagg aacgtggccg acctggagga gcagaacaag  
1500  
cgcatacagg cggagctcaa caagtacaag tacaagnntc cggcggccac gacagcgcgc  
1560  
ggcaccacga caacgccana gaccgaggcc ctgcaggagg agctgaaggc ggcgcgccctg  
1620  
cagatcaacg agctcagcgg caaggtcatg cagctgcagt acgagaaccg cgtgcttatg  
1680  
tccaacatgc agcgtacga cctggcctcg cacctgggca tccgcggcag cccccgcgac  
1740  
agcgacgccc agagcgacgc gggcaagaag gagagcgacg acgactcgcg gcctccgcac  
1800  
cgcaagcgcg aagggcccat cggcggcgag agcgactcgg aggaggtggn cgcaacatcc  
1860  
gctgcctcan cgccactcg ctcttctac ccggcgcccc ggccctggcc caagagcttc  
1920  
tccgatcggc agcagatgaa ggacatccgc tcggaggccg agcgctggg caagaccatc  
1980  
gaccggctca tcgccgacac gagcaccatc atcacggagg cgcgcatcnt acgtggccaa  
2040  
cggggacctg ttncggact catggacgag gaggacgacg gcagccgcat ccgggagcac  
2100  
gagctgctct accgcatcaa cgctcagatg aaggccttcc gcaaggagct gcagaccttc  
2160  
atcgaccgcc tcgaggtgcc caagtctgcg gacgaccgcg gcgccgagga gccatttcc  
2220  
gtgagtcaga tgtccagcc tatcatTTTA ttatttctca ttcttgatt attttcatca  
2280  
ctttcttaca caacaatatt taaacttgtc ttctttttta cactgttttt tgtactgtaa  
2340  
atctttcatc atttaccatt cattgtagta ttttcagttt gtttattttg ttcacccttc  
2400  
aagacaagaa gtaaaagaag tataatttct gtagtaacca atgctataaa aacactgaag  
2460  
actgcttatt tctttacaaa gatacaactc atcttaccaa gaccaaattc aataagaagc  
2520  
ccaaacacta aaatatttca ggtaagaaag tgtgacattt ttctgtatga attgttttaa  
2580  
tttttacttc ttttttcat cctgtttgtc tcctcttgat aaataattgg catactgaat  
2640  
ataaaaatgg actacatgtc tcataattat ttctcagtag ttcactatta ttattcaaaa  
2700  
gctggacgga cattcacaat ttggtcacat ttccaaaaag  
2740

&lt;210&gt; 1686

&lt;211&gt; 463

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1686

```

Xaa Gly Gly Ala Gly Gly Gly Ser Gly Glu Arg Glu Gly Gly Ala Pro
 1           5           10           15
Gln Pro Pro Pro Arg Gly Trp Arg Gly Lys Gly Val Arg Ala Gln
      20           25           30
Gln Arg Gly Gly Ser Gly Gly Glu Gly Ala Ser Pro Ser Pro Ser Ser
      35           40           45
Ser Ser Ala Gly Lys Thr Pro Gly Thr Gly Ser Arg Asn Ser Gly Ser
      50           55           60
Gly Val Ala Gly Gly Gly Ser Gly Gly Gly Gly Ser Tyr Trp Lys Glu
65           70           75           80
Gly Cys Leu Gln Ser Glu Leu Ile Gln Phe His Leu Lys Lys Glu Arg
      85           90           95
Ala Ala Ala Ala Ala Ala Ala Ala Gln Met His Ala Lys Asn Gly Gly
      100          105          110
Gly Ser Ser Ser Arg Ser Ser Pro Val Ser Gly Pro Pro Ala Val Cys
      115          120          125
Glu Thr Leu Ala Val Ala Ser Ala Ser Pro Met Ala Ala Ala Ala Glu
      130          135          140
Gly Pro Gln Gln Ser Ala Glu Gly Ser Ala Ser Gly Gly Gly Met Gln
145          150          155          160
Ala Ala Ala Pro Pro Ser Ser Gln Pro His Pro Gln Gln Leu Gln Glu
      165          170          175
Gln Glu Glu Met Gln Glu Glu Met Glu Lys Leu Arg Glu Glu Asn Glu
      180          185          190
Thr Leu Lys Asn Glu Ile Asp Glu Leu Arg Thr Glu Met Asp Glu Met
      195          200          205
Arg Asp Thr Phe Phe Glu Glu Asp Ala Cys Gln Leu Gln Glu Met Arg
      210          215          220
His Glu Leu Glu Arg Ala Asn Lys Asn Cys Arg Ile Leu Gln Tyr Arg
225          230          235          240
Leu Arg Lys Ala Glu Arg Lys Arg Leu Arg Tyr Ala Gln Thr Gly Glu
      245          250          255
Ile Asp Gly Glu Leu Leu Arg Ser Leu Glu Gln Asp Leu Lys Val Ala
      260          265          270
Lys Asp Val Ser Val Arg Leu His His Glu Leu Glu Asn Val Glu Glu
      275          280          285
Lys Arg Thr Thr Thr Glu Asp Glu Asn Glu Lys Leu Arg Gln Gln Leu
      290          295          300
Ile Glu Val Glu Ile Ala Lys Gln Ala Leu Gln Asn Glu Leu Glu Lys
305          310          315          320
Met Lys Glu Leu Ser Leu Lys Arg Arg Gly Ser Lys Asp Leu Pro Lys
      325          330          335
Ser Glu Lys Lys Ala Gln Gln Thr Pro Thr Glu Glu Asp Asn Glu Asp
      340          345          350
Leu Lys Cys Gln Leu Gln Phe Val Lys Glu Glu Ala Ala Leu Met Arg
      355          360          365
Lys Lys Met Ala Lys Ile Asp Lys Glu Lys Asp Arg Phe Glu His Glu
      370          375          380
Leu Gln Lys Tyr Arg Ser Phe Tyr Gly Asp Leu Asp Ser Pro Leu Pro
385          390          395          400
Lys Gly Glu Ala Gly Gly Pro Pro Ser Thr Arg Glu Ala Glu Leu Lys

```

```

                405                410                415
Leu Arg Leu Arg Leu Val Glu Glu Glu Ala Asn Ile Leu Gly Arg Lys
                420                425                430
Ile Val Glu Leu Glu Val Glu Asn Arg Gly Leu Lys Ala Glu Leu Asp
                435                440                445
Asp Leu Arg Gly Asp Asp Xaa Ser Thr Ala Arg Pro Thr Arg Ser
                450                455                460

```

<210> 1687  
 <211> 326  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1687
gtgcacacag gtgagcgtcc ctacaagtgt ccacactgcg actatgcagg taccagtcg
60
ggctcgctca agtatcacct tcagcgtcac caccgagagc agaagaacag tgcgggttcc
120
tgggectccc ccagaacccc cgccaccttc ccagcggggc tcaactgcagc cgcagtcagg
180
agccaagcca actcaggcct cagccacctg ggtagagggc actgcaagta cccggcctcc
240
ttcgagcagc accggaccag ggtcccgtag gaagcctgct agccctggga ggaccctgcg
300
aaacggcgat gtggtgaagc cgaact
326

```

<210> 1688  
 <211> 89  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1688
Val His Thr Gly Glu Arg Pro Tyr Lys Cys Pro His Cys Asp Tyr Ala
1      5      10      15
Gly Thr Gln Ser Gly Ser Leu Lys Tyr His Leu Gln Arg His His Arg
20     25     30
Glu Gln Lys Asn Ser Ala Gly Ser Trp Ala Ser Pro Arg Thr Pro Ala
35     40     45
Thr Phe Pro Ala Gly Leu Thr Ala Ala Ala Val Arg Ser Gln Ala Asn
50     55     60
Ser Gly Leu Ser His Leu Gly Arg Gly His Cys Lys Tyr Pro Ala Ser
65     70     75     80
Phe Glu Gln His Arg Thr Arg Val Pro
85

```

<210> 1689  
 <211> 301  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1689
nggggaagcc atggctgctt aaggacaatg cactgtcagc tcggtgatgt cttgatttgg
60

```

tctgggattc tgcacttagt aattgcagat aatactcatg tggcgccaag gaaaaaaaaa  
 120  
 ttggcctttt ccaggtccat taagcctaaa caaaccacat cactttacat caggcagatc  
 180  
 atgtgggtacc agaattttcc agtttggcgg actatcttga tcaaataaac taaattattg  
 240  
 ccactgtggc tatctgtgaa agaacacaat gaagaaaatc tggagcctta tctcatactc  
 300  
 a  
 301

<210> 1690

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1690

Met	His	Cys	Gln	Leu	Gly	Asp	Val	Leu	Ile	Trp	Ser	Gly	Ile	Leu	His
1			5					10					15		
Leu	Val	Ile	Ala	Asp	Asn	Thr	His	Val	Ala	Pro	Arg	Lys	Lys	Lys	Leu
			20					25					30		
Ala	Phe	Ser	Gln	Ser	Ile	Lys	Pro	Lys	Gln	Thr	Thr	Ser	Leu	Tyr	Ile
			35				40					45			
Arg	Gln	Ile	Met	Trp	Tyr	Gln	Asn	Phe	Pro	Val	Trp	Arg	Thr	Ile	Leu
			50				55					60			
Ile	Lys	Ser	Thr	Lys	Leu	Leu	Pro	Leu	Trp	Leu	Ser	Val	Lys	Glu	His
65					70					75				80	
Asn	Glu	Glu	Asn	Leu	Glu	Pro	Tyr	Leu	Ile	Leu					
				85						90					

<210> 1691

<211> 483

<212> DNA

<213> Homo sapiens

<400> 1691

nacgcgttcc ggtatgccga tgggccggtg ctgctggggc tccgccggcg gcgcggtgag  
 60  
 ttgtgccttg aagtgtggga ccgcggcccc ggcattcctc aagacaaaca aaagtcattc  
 120  
 ttcgaagaat tcaaacgcct ggacagtcac cagacccgcg ccgagaaaagg cctgggcctg  
 180  
 ggcctggcga ttgccgacgg cttgtgccgc gtgctcgggc atcgcttgag cgtgcgttcg  
 240  
 tggccgggca agggcagcgt gttcagcgtg cgcgtgccgt tggcgcgcac ccaggtcagc  
 300  
 gcgcctgccca agccggcgca ggaaagcggc cagccgttga gtggcgcgca ggtgctgtgt  
 360  
 gtgaataaca aagaaagcat cctgatcggc atgcgcagct tgctcccgcg ctggggctgc  
 420  
 gaagtctggc ccgcgcgcga ccaggcgcaa tgtgccgcgc tgttggtgga ggggtgtgcg  
 480  
 ccg  
 483

<210> 1692  
 <211> 161  
 <212> PRT  
 <213> Homo sapiens

<400> 1692  
 Xaa Ala Phe Arg Tyr Ala Asp Gly Pro Val Leu Leu Gly Val Arg Arg  
   1                  5                  10                  15  
 Arg Arg Gly Glu Leu Cys Leu Glu Val Trp Asp Arg Gly Pro Gly Ile  
           20                  25                  30  
 Pro Gln Asp Lys Gln Lys Ser Phe Phe Glu Glu Phe Lys Arg Leu Asp  
           35                  40                  45  
 Ser His Gln Thr Arg Ala Glu Lys Gly Leu Gly Leu Gly Leu Ala Ile  
           50                  55                  60  
 Ala Asp Gly Leu Cys Arg Val Leu Gly His Arg Leu Ser Val Arg Ser  
   65                  70                  75                  80  
 Trp Pro Gly Lys Gly Ser Val Phe Ser Val Arg Val Pro Leu Ala Arg  
                   85                  90                  95  
 Thr Gln Val Ser Ala Pro Ala Lys Pro Ala Gln Glu Ser Gly Gln Pro  
           100                  105                  110  
 Leu Ser Gly Ala Gln Val Leu Cys Val Asn Asn Lys Glu Ser Ile Leu  
           115                  120                  125  
 Ile Gly Met Arg Ser Leu Leu Pro Arg Trp Gly Cys Glu Val Trp Pro  
           130                  135                  140  
 Ala Arg Asp Gln Ala Gln Cys Ala Ala Leu Leu Ala Glu Gly Val Arg  
   145                  150                  155                  160  
 Pro

<210> 1693  
 <211> 333  
 <212> DNA  
 <213> Homo sapiens

<400> 1693  
 acgcgtgttc catctgcagc cgtgcgaaaa ctctcccacc atgtcgcaga ctggatactt  
 60  
 cgaggattca agctactaca agtgtgacac agatgacacc ttcgaagccc gagaggagat  
 120  
 actggggggg atgaggcctt cgacactgcc aactcctcca tcgtgtctgg cgagagtatc  
 180  
 cgtttttttg tcaatgtcaa ccttgagatg caggccacca aactgagaa tgaagcgact  
 240  
 tccgggtggc gtgtgtctct gcacacctcc cgaaaggcca gcatcgtcct gaacgagacg  
 300  
 gccacctccc tggataacgt gctgcggacc atg  
 333

<210> 1694  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1694

```

Met Val Arg Ser Thr Leu Ser Arg Glu Val Ala Val Ser Phe Arg Thr
 1             5             10             15
Met Leu Ala Phe Arg Glu Val Cys Arg Ser Thr Gln Pro Pro Glu Val
          20             25             30
Ala Ser Phe Ser Val Leu Val Ala Cys Ile Ser Arg Leu Thr Leu Thr
      35             40             45
Lys Lys Arg Ile Leu Ser Pro Asp Thr Met Glu Glu Leu Ala Val Ser
      50             55             60
Lys Ala Ser Ser Pro Pro Val Ser Pro Leu Gly Leu Arg Arg Cys His
      65             70             75             80
Leu Cys His Thr Cys Ser Ser Leu Asn Pro Arg Ser Ile Gln Ser Ala
          85             90             95
Thr Trp Trp Glu Ser Phe Arg Thr Ala Ala Asp Gly Thr Arg
      100             105             110

```

&lt;210&gt; 1695

&lt;211&gt; 485

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1695

```

tgatcagctt tatcaggagt ttttgcaagt accgcagatt tatgttgaat cctagtaagc
60
gccaggaatt tgaagactat cttcaccagg aaatgcaaaa tagcaaggaa aatttcacca
120
cagcacacaa cacatcggga cgttcagctc caccctccac aaatgtccgg agtgcagacc
180
aagagaatgg agaaataacc cttgtaaaag gtcgtatatt tggccacagg attatcactg
240
tcaactttgc gatcaatgat ctatatctct tttctgaaat ggagaaattt aatgatctgg
300
tcagttcagc ccacatgctg cagggtcaacc gggcatataa tgagaatgat gtgaccta
360
tgcggtccaa aatgaacatt atccaaaaac tcttctgaa tcttgacatc cctccaaagc
420
tgagggtgaa tgtccctgag ttccagaagg atgccatcct tgctgccatc acagagggct
480
accta
485

```

&lt;210&gt; 1696

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1696

```

Met Leu Asn Pro Ser Lys Arg Gln Glu Phe Glu Asp Tyr Leu His Gln
 1             5             10             15
Glu Met Gln Asn Ser Lys Glu Asn Phe Thr Thr Ala His Asn Thr Ser
          20             25             30
Gly Arg Ser Ala Pro Pro Ser Thr Asn Val Arg Ser Ala Asp Gln Glu
      35             40             45
Asn Gly Glu Ile Thr Leu Val Lys Arg Arg Ile Phe Gly His Arg Ile

```

```

      50              55              60
Ile Thr Val Asn Phe Ala Ile Asn Asp Leu Tyr Phe Phe Ser Glu Met
65              70              75              80
Glu Lys Phe Asn Asp Leu Val Ser Ser Ala His Met Leu Gln Val Asn
      85              90              95
Arg Ala Tyr Asn Glu Asn Asp Val Ile Leu Met Arg Ser Lys Met Asn
      100             105             110
Ile Ile Gln Lys Leu Phe Leu Asn Ser Asp Ile Pro Pro Lys Leu Arg
      115             120             125
Val Asn Val Pro Glu Phe Gln Lys Asp Ala Ile Leu Ala Ala Ile Thr
      130             135             140
Glu Gly Tyr Leu
145

```

<210> 1697  
 <211> 337  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1697
accaggttcc caccatcctc aggggaatca caggttactg gctttggaga ccgagatgtc
60
ttcccgctc ccaggggcct gtggatggga ctccctgcga attcgactcc caggggaaaa
120
gccaaagact gcctccttgg gacaaactggg gcggcagctg tgatcgacaca tggcttcagc
180
agaggcctga gcggtgcct ccgttggcca gcaggctctg agagcactcg cccggcctga
240
ctgttcaccc atcctttcac ccggaggcca gctgtggctg tctgtgctct cagaggggag
300
gcgatgggca aggcgcctgc catgcagatg ggtggtg
337

```

<210> 1698  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1698
Met Ala Gly Ala Leu Pro Ile Ala Ser Pro Leu Arg Ala Gln Thr Ala
1      5      10      15
Thr Ala Gly Leu Arg Val Lys Gly Trp Met Asn Ser Gln Ala Gly Arg
      20      25      30
Val Leu Ser Glu Pro Ala Gly Gln Arg Arg Gln Pro Leu Arg Pro Leu
      35      40      45
Leu Lys Pro Cys Ala Ile Thr Ala Ala Ala Pro Val Val Pro Arg Arg
      50      55      60
Gln Leu Leu Ala Phe Pro Leu Gly Val Glu Phe Ala Gly Ser Pro Ile
65      70      75      80
His Arg Pro Leu Gly Gly Gly Lys Thr Ser Arg Ser Pro Lys Pro Val
      85      90      95
Thr Cys Asp Ser Pro Glu Asp Gly Gly Asn Leu
      100     105

```



<210> 1699  
 <211> 442  
 <212> DNA  
 <213> Homo sapiens

<400> 1699  
 nacgcgttcc ttaaggatca tcctgagggt ctgtacgtag accttctaata tgcggatatg  
 60  
 aatggtgtgg tgcgctggca ggcacatcgaa cgcaccagcc tccacaaggt ttacgagaag  
 120  
 ggcattaacc tgcctgcctc tctatttgcc ctggatatca atgggtcaac ggtggaaagc  
 180  
 accggcctgg gtctggacat cggatgatgct gaccgaatct gttatccaat ccccgacacc  
 240  
 ctgtgcaatg aaccttgcca aaagcgccca accgcgaac tgctgatgac catgcacgaa  
 300  
 cttgaagggg aacctttttt cgcgcatact cgcgaagtac tccgccaagt tgtaagcaaa  
 360  
 ttgacgacc tcggtctgac catctgcgcc gcattcgagc tggagttcta cctgattgac  
 420  
 caggagaacg tgaatggccg gc  
 442

<210> 1700  
 <211> 147  
 <212> PRT  
 <213> Homo sapiens

<400> 1700  
 Xaa Ala Phe Leu Lys Asp His Pro Glu Val Leu Tyr Val Asp Leu Leu  
 1 5 10 15  
 Ile Ala Asp Met Asn Gly Val Val Arg Gly Lys Arg Ile Glu Arg Thr  
 20 25 30  
 Ser Leu His Lys Val Tyr Glu Lys Gly Ile Asn Leu Pro Ala Ser Leu  
 35 40 45  
 Phe Ala Leu Asp Ile Asn Gly Ser Thr Val Glu Ser Thr Gly Leu Gly  
 50 55 60  
 Leu Asp Ile Gly Asp Ala Asp Arg Ile Cys Tyr Pro Ile Pro Asp Thr  
 65 70 75 80  
 Leu Cys Asn Glu Pro Trp Gln Lys Arg Pro Thr Ala Gln Leu Leu Met  
 85 90 95  
 Thr Met His Glu Leu Glu Gly Glu Pro Phe Phe Ala Asp Pro Arg Glu  
 100 105 110  
 Val Leu Arg Gln Val Val Ser Lys Phe Asp Asp Leu Gly Leu Thr Ile  
 115 120 125  
 Cys Ala Ala Phe Glu Leu Glu Phe Tyr Leu Ile Asp Gln Glu Asn Val  
 130 135 140  
 Asn Gly Arg  
 145

<210> 1701  
 <211> 8265  
 <212> DNA  
 <213> Homo sapiens

<400> 1701  
nacgcgtgaa gggagggcga ggccggagcc cgagggcgac ccgagaagcg gcggggcggc  
60  
gggccggcgg gcggggcgca gagccaggca gcgcaggat agccaggctg gagaaaagaa  
120  
gctgccacca tggttgcaact ttcactgaag atcagcattg ggaatgtggt gaagacgatg  
180  
cagtttgagc cgtctacat ggtgtacgac gcctgccgca tcattcgtga gcggatccca  
240  
gaggccccag ctggtcctcc cagcgacttt gggctctttc tgtcagatga tgaccccaaa  
300  
aagggtatat ggctggaggc tgggaaagct ttggactact acatgctccg aaatggggag  
360  
actatggagt acaggaagaa acagagaccc ctgaagatcc gtatgctgga tggaaactgtg  
420  
aagacgatca tgggtgatga ctctaagact gtcactgaca tgctcatgac catctgtgcc  
480  
cgcatggca tcaccaatca tgatgaatat tcattggttc gagagctgat ggaagaaaag  
540  
aaagaggaag gaacgggcac actcaaaaag gacaagacat tgctgcgaga tgaaaagaag  
600  
atggagaaac taaagcagaa attgcacaca gatgatgagt tgaactggct ggaccatggc  
660  
cggacactga gggagcaggg tgtagaggag cacgagacgc tgctgctgcg gaggaagtcc  
720  
ttttactcag accagaatgt ggattcccg gaccctgtac agctgaacct cctgtatgtg  
780  
caggcacgag atgacatcct gaatggctcc caccctgtct cctttgacaa ggctgtgag  
840  
tttgctggct tccaatgcca gatccagttt gggccccaca atgagcagaa gcacaaggct  
900  
ggcttccttg acctgaagga ctctctgccc aaggagtatg tgaagcagaa gggagagcgt  
960  
aagatcttcc aggcacacaa gaattgtggg cagatgagtg agattgaggc caaggctccg  
1020  
tacgtgaagc tagcccgctt tctcaagact tacgggtgtct ccttcttctt ggtgaaggaa  
1080  
aaaatgaaag ggaagaacaa gctagtgcc aggcttcttg gcatcaccaa ggagtgtgtg  
1140  
atgcgagtgg atgagaagac caaggaaagt atccaggagt ggaacctcac caacatcaaa  
1200  
cgctgggctg cgtctcccaa aagcttcacc ctggattttg gagattacca agatggctat  
1260  
tactcagtac agacaactga aggggagcag attgcacagc tcattgccgg ctacatcgat  
1320  
atcatcctga agaagaaaaa aagcaaggat cactttgggc tggaaggaga tgaggagtct  
1380  
actatgctgg aggactcagt gtccccaaa aagtcaacag tcctgcagca gcaatacaac  
1440  
cgggtgggga aagtggagca tggctctgtg gccctgcctg ccatcatgcg ctctggagcc  
1500  
tctggtcctg agaatttcca ggtgggcagc atgccccctg cccagcagca gattaccagc  
1560

ggccagatgc accgaggaca catgcctcct ctgacttcag cccagcaggc actcactgga  
1620  
accattaact ccagcatgca ggccgtgcag gctgccagc ccacctgga tgactttgac  
1680  
actctgccgc ctcttgccca ggatgctgcc tctaaggcct ggcgtaaaaa caagatggat  
1740  
gaatcaaagc atgagatcca ctctcaggta gatgccatca cagctgggtac tgcgtctgtg  
1800  
gtgaacctga cagcagggga ccctgctgag acagactata ccgcagtggg ctgtgcagtc  
1860  
accacaatct cctccaacct gacggagatg tcccgtgggg tgaagctgct ggctgccttg  
1920  
ctggaggacg aaggcggcag tggtcggccc ctgttgccag cagcaaagg ccttgcgga  
1980  
gcagtgtcag aactgctgcg cagtgcccaa ccagccagtg ctgagccccg tcagaacctg  
2040  
ctgcaagcag ctgggaacgt gggccaggcc agtggggagc tgttgcaaca aattggggaa  
2100  
agtgatactg acccccactt ccaggatgcg ctaatgcagc tcgccaaagc tgtggcaagt  
2160  
gctgcagctg ccctggctct caaggccaag agtgtggccc agcggacaga ggactcggga  
2220  
cttcagacct aagttattgc tgcagcaaca cagtgtgccc tatccacttc ccaactagt  
2280  
gcctgtacta agtggtggc acctacaatc agctcacctg tctgccaaaga gcaactgggt  
2340  
gaggctggac gactggtagc caaagccgtg aagggtgtg tgtctgcctc ccaggcagct  
2400  
acagaggatg ggcaactgtt gcgaggggta ggagcagcag ccacagctgt caccagggc  
2460  
ctaaatgagc tgtgcagca tgtgaaagcc catgccacag gggctgggccc tgcgtggcgt  
2520  
tatgaccagg ctactgacac catcctaacc gtcactgaga acatctttag ctccatgggt  
2580  
gatgctgggg agatgggtgc acaggcccgc atcctggccc aagccacatc tgacctggtc  
2640  
aatgccatca aggtgatgc tgagggggaa agtgatctgg agaactcccc caagctcctg  
2700  
agtgtgcca agatcctcgc tgatgccacc gccaatggtg tggaggcggc caagggagca  
2760  
gccgcccacc ctgacagtga ggaacagcag cagcgactgc gtgaagcagc tgaggggctt  
2820  
cgcatggcca ccaatgcagc tgcgcagaac gccatcaaga agaagttggt gcagcgcctg  
2880  
gagcatgcag ccaagcaagc tgcagcctct gcaacacaga ccattgctgc agcccaacat  
2940  
gcagcctctg cccccaaggc ctctgccggc cccagcccc tgcgtgtgca gagctgcaag  
3000  
gcagtggcag agcagattcc actgctggtg cagggcgtcc gaggaagcca agcccagcct  
3060  
gacagcccca gcgtcagct tgccctcatt gctgccagcc agagcttcct gcagccaggt  
3120  
gggaagatgg tggcagctgc aaaggcctca gtgccaacga ttcaggacca ggettcagcc  
3180

atgcagctga gtcagtgtgc caagaacctg ggcaccgcgc tggctgaact ccggacggct  
3240  
gcccgagaagg ctcaggaagc atgtggacct ttggagatgg attctgcact gagtgtggta  
3300  
cagaatctag agaaagatct acaggaagtg aaggcagcag ctcgagatgg caagcttaaa  
3360  
cccttacctg gggagacaat ggagaagtgt acccaggacc tgggcaacag caccaaagcc  
3420  
gtgagctcag ccatcgccca gctactggga gaggttgccc agggcaatga gaattatgca  
3480  
ggatttgag ctcgggatgt ggcagggtgg ctgcgggtcac tggcccaggc cgctagggga  
3540  
gtcgtgcac tgacgtcaga tcctgcagtg caggccattg tacttgatac ggccagtgat  
3600  
gtgctggaca aggccagcag cctcattgag gaggcgaaaa aggcagctgg ccatccaggg  
3660  
gacctgaga gccagcagcg gcttgcccag gtggctaaag cagtgaacca ggctctgaac  
3720  
cgctgtgtca gctgcctacc tggccagcgc gatgtggata atgccctgag ggcagttgga  
3780  
gatgccagca agcgactcct gagtactcg ctctcctcta gcaactgggac atttcaagaa  
3840  
gctcagagcc ggttgaatga agctgctgct gggctgaatc aggcagccac agaactggg  
3900  
caggcctctc ggggaacccc tcaggacctg gctcgagcct caggccgatt tggacaggac  
3960  
ttcagcacct tcctggaagc tgggtgtggag atggcaggcc aggcctccgag ccaggaggac  
4020  
cgagcccaag ttgtgtccaa cttgaagggc atctccatgt cttcaagcaa acttctctctg  
4080  
gctgccaagg cctgtgccac ggacctgct gcccctaacc tcaagagtca gctggctgca  
4140  
gctgccaggg cagtaactga cagcatcaat cagctcatca ctatgtgcac ccagcaggca  
4200  
cccggccaga aggagtgtga taacgccctg cgggaattgg agacgggccg ggaactcctg  
4260  
gagaacccag tccagcccat caatgacatg tcctactttg gttgcctgga cagtgtaatg  
4320  
gagaactcaa aggtgctggg cgaggccatg actggcatct cccaaaatgc caagaacgga  
4380  
aacctgccag agtttggaga tgccatttcc acagcctcaa aggcactttg tggcttcacc  
4440  
gaggcagctg cacaggctgc atatctggtt ggtgtctctg accccaatag ccaagctgga  
4500  
cagcaagggc tagtggagcc cacacagttt gcccgtgcaa accaggcaat tcagatggcc  
4560  
tgccagagtt tgggagagcc tggctgtacc caggcccagg tgcctctctg agccaccatt  
4620  
gtggctaaac acacctctgc actgtgtaac agctgtcgcc tggcttctgc ccgtaccacc  
4680  
aatcctactg ccaagcgcca gtttgtacag tcagccaagg aggtggccaa cagcacagcc  
4740  
aatcttgtca agaccatcaa ggcgctagat ggggccttca cagaggagaa ccgtgccag  
4800

tgccgagcag caacagcccc tctgctggag gctgtggaca atctgagtgc ctttgcgtcc  
4860  
aaccttgagt tctccagcat tcctgcccag atcagccctg agggtcgggc tgccatggag  
4920  
cccattgtga tctctgccaa gacaatgtta gagagtgccg ggggactcat ccagacagcc  
4980  
cgggccctcg cagtcaatcc ccgggacccc ccgagctggt cgggtgctggc cggccactcc  
5040  
cgtactgtct cagactccat caagaagcta attacaagca tgagggacaa ggctccaggg  
5100  
cagctggagt gtgaaacggc cattgcagct ctgaacagtt gtctacggga cctagaccag  
5160  
gcttccctcg ctgcagtcag ccagcagctt gctccccgtg agggaaatctc tcaagaggcc  
5220  
ttgcacactc agatgtctac tgcagtccaa gagatctccc atctcattga gccgctggcc  
5280  
aatgtgccc gggctgaagc ctcccagctg ggacacaagg tgtcccagat ggcgcagtac  
5340  
tttgagccgc tcacctgggc tgcagtgggt gctgcctcca agacctgag ccacctgcag  
5400  
cagatggcac tcctggacca gactaaaaca ttggcagagt ctgccctgca gttgctatac  
5460  
actgccaaag aggctggtgg taacccaaag caagcagctc acaccagga agccctggag  
5520  
gaggctgtgc agatgatgac cgaggccgta gaggacctga caacaaccct caacgaggca  
5580  
gccagtgtct ctgggggtcgt ggggtggcatg gtggactcca tcaccaggc catcaaccag  
5640  
ctagatgaag gaccaatggg tgaaccagaa ggttccttcg tggattacca aacaactatg  
5700  
gtgcggcagc ccaaggccat tgcagtgacc gttcaggaga tggttaccaa gtcaaacacc  
5760  
agcccagagg agctgggccc tcttgctaac cagctgacca gtgactatgg ccgtctggcc  
5820  
tcggaggcca agcctgcagc ggtggctgct gaaaatgaag agataggttc ccatatcaaa  
5880  
caccgggtac aggagctggg ccatggctgt gccgctctgg tcaccaaggc aggcgccttg  
5940  
cagtgcagcc ccagtgatgc ctacaccaag aaggagctca tagagtgtgc ccggagagtc  
6000  
tctgagaagg tctccacgt cctggctgct ctccaggctg ggaatcgtgg caccagggcc  
6060  
tgcatacag cagccagcgc tgtgtctggt atcattgctg accttgacac caccatcatg  
6120  
ttcgccactg ctggcacact taaccgtgag ggtactgaaa cttctgcaga ccaccgggag  
6180  
ggcatcttaa agactgcgaa ggtgctgggt gaggacacca aggtcctggt gcaaaacgca  
6240  
gctgggagcc aggagaagtt ggcgcaggct gccagtcct ccgtggcgac catcaccgc  
6300  
ctcgtgatg tggtaagct ggggtgcagc agcctgggag ctgaggacct tgagaccag  
6360  
gtggtactaa tcaacgcagt gaaagatgta gccaaagccc tgggagacct catcagtgca  
6420

acgaaggctg cagctggcaa agttggagat gaccctgctg tgtggcagct aaagaactct  
6480  
gccaaaggtga tggtagacaa tgtgacatca ttgcttaaga cagtaaaagc cgtggaagat  
6540  
gaggccacca aaggcactcg ggccttgag gcaaccacag aacacatacg gcaggagctg  
6600  
gcggttttct gttccccaga gccacctgcc aagacctcta cccagaaga cttcatccga  
6660  
atgaccaag gttatcaccat ggcaaccgcc aaggccgttg ctgctggcaa ttcctgtcgc  
6720  
caggaagatg tcattgccac agccaatctg agccgccgtg ctattgcaga tatgcttcgg  
6780  
gcttgcaagg aagcagctta ccaccagaa gtggcccttg atgtgcggct tcgagccctg  
6840  
cactatggcc gggagtgtgc caatggctac ctggaactgc tggaccatgt actgctgacc  
6900  
ctgcagaagc caagcccaga actgaagcag cagttgacag gacattcaa gcgtgtggct  
6960  
ggttcctgca ctgagctcat ccaggctgct gaagccatga agggaacaga atgggtagac  
7020  
ccagaggacc ccacagctat tgctgagaat gagctcctgg gagctgcagc cgccattgag  
7080  
gctgcagcca aaaagctaga gcagctgaag ccccgggcca aaccaagga ggcagatgag  
7140  
tccttgaact ttgaggagca gatactagaa gctgccaagt ccattgcagc agccaccagt  
7200  
gcactggtaa aggtgtgcgc ggctgcccag agagaactag tggcccaagg gaaggtgggt  
7260  
gccattccag ccaatgcact ggacgatggg cagtgtccc agggcctcat ttctgctgcc  
7320  
cggatgggtg ctgcggccac caacaatctg tgtgaggcag ccaatgcagc tgtacaaggc  
7380  
catgccagcc aggagaagct catctcatca gccaaagcag tagctgcctc cacagcccag  
7440  
ctccttggtg cctgcaaggt caaggctgac caggactcgg aggcaatgaa acgacttcag  
7500  
gctgctggca acgcagtga ggcagcctca gataatctgg tgaaagcagc acagaaggct  
7560  
gcagcctttg aagagcagga gaatgagaca gtggtggtga aagagaagat ggttgccggc  
7620  
attgccaga tcatgcagc acaggaagaa atgcttcgga aggaacgaga gctggaagag  
7680  
gcgcggaaga aactggccca gatccggcag cagcagtaca agtttctgcc ttcagagctt  
7740  
cgagatgagc actaaagaag cctcttctat ttaatgcaga cccggcccag agactgtgcg  
7800  
tgccactacc aaagccttct gggctgtcgg ggcccaacct gcccaacccc agcactcccc  
7860  
aaagtgcctg ccaaacccca gggcctggcc ccgcccagtc ccgcagtaca tcccctgtcc  
7920  
cctccccaac cccaagtgc ttcatgcct agggccccc aagtgcctgc cctccccag  
7980  
agtattaacg ctccaagagt attattaacg ctgctgtacc tcgatctgaa tctgccggg  
8040

cccagccca cttccacctg ccagcagctt ccagccagtc cccacagcct catcagctct  
 8100  
 cttcaccgtt ttttgatact atcttcccc accccagct acccataggg gctgcagagt  
 8160  
 tataagcccc aaacaggtca tgctccaata aaaatgattc tacctacaac ctctgcctgg  
 8220  
 cttcaaggga gatacaagtt ttctcccagg gcagtaggag agaca  
 8265

<210> 1702

<211> 2541

<212> PRT

<213> Homo sapiens

<400> 1702

Met	Val	Ala	Leu	Ser	Leu	Lys	Ile	Ser	Ile	Gly	Asn	Val	Val	Lys	Thr
1				5					10					15	
Met	Gln	Phe	Glu	Pro	Ser	Thr	Met	Val	Tyr	Asp	Ala	Cys	Arg	Ile	Ile
			20					25					30		
Arg	Glu	Arg	Ile	Pro	Glu	Ala	Pro	Ala	Gly	Pro	Pro	Ser	Asp	Phe	Gly
			35				40					45			
Leu	Phe	Leu	Ser	Asp	Asp	Asp	Pro	Lys	Lys	Gly	Ile	Trp	Leu	Glu	Ala
	50				55					60					
Gly	Lys	Ala	Leu	Asp	Tyr	Tyr	Met	Leu	Arg	Asn	Gly	Asp	Thr	Met	Glu
65				70					75					80	
Tyr	Arg	Lys	Lys	Gln	Arg	Pro	Leu	Lys	Ile	Arg	Met	Leu	Asp	Gly	Thr
			85					90					95		
Val	Lys	Thr	Ile	Met	Val	Asp	Asp	Ser	Lys	Thr	Val	Thr	Asp	Met	Leu
			100					105					110		
Met	Thr	Ile	Cys	Ala	Arg	Ile	Gly	Ile	Thr	Asn	His	Asp	Glu	Tyr	Ser
			115				120					125			
Leu	Val	Arg	Glu	Leu	Met	Glu	Glu	Lys	Lys	Glu	Glu	Gly	Thr	Gly	Thr
			130				135					140			
Leu	Lys	Lys	Asp	Lys	Thr	Leu	Leu	Arg	Asp	Glu	Lys	Lys	Met	Glu	Lys
145				150					155					160	
Leu	Lys	Gln	Lys	Leu	His	Thr	Asp	Asp	Glu	Leu	Asn	Trp	Leu	Asp	His
			165					170					175		
Gly	Arg	Thr	Leu	Arg	Glu	Gln	Gly	Val	Glu	Glu	His	Glu	Thr	Leu	Leu
			180				185						190		
Leu	Arg	Arg	Lys	Phe	Phe	Tyr	Ser	Asp	Gln	Asn	Val	Asp	Ser	Arg	Asp
			195				200					205			
Pro	Val	Gln	Leu	Asn	Leu	Leu	Tyr	Val	Gln	Ala	Arg	Asp	Asp	Ile	Leu
			210			215					220				
Asn	Gly	Ser	His	Pro	Val	Ser	Phe	Asp	Lys	Ala	Cys	Glu	Phe	Ala	Gly
225				230					235					240	
Phe	Gln	Cys	Gln	Ile	Gln	Phe	Gly	Pro	His	Asn	Glu	Gln	Lys	His	Lys
			245					250					255		
Ala	Gly	Phe	Leu	Asp	Leu	Lys	Asp	Phe	Leu	Pro	Lys	Glu	Tyr	Val	Lys
			260					265					270		
Gln	Lys	Gly	Glu	Arg	Lys	Ile	Phe	Gln	Ala	His	Lys	Asn	Cys	Gly	Gln
			275				280					285			
Met	Ser	Glu	Ile	Glu	Ala	Lys	Val	Arg	Tyr	Val	Lys	Leu	Ala	Arg	Ser
			290			295					300				
Leu	Lys	Thr	Tyr	Gly	Val	Ser	Phe	Phe	Leu	Val	Lys	Glu	Lys	Met	Lys

305					310					315				320	
Gly	Lys	Asn	Lys	Leu	Val	Pro	Arg	Leu	Leu	Gly	Ile	Thr	Lys	Glu	Cys
				325					330					335	
Val	Met	Arg	Val	Asp	Glu	Lys	Thr	Lys	Glu	Val	Ile	Gln	Glu	Trp	Asn
			340					345					350		
Leu	Thr	Asn	Ile	Lys	Arg	Trp	Ala	Ala	Ser	Pro	Lys	Ser	Phe	Thr	Leu
		355					360					365			
Asp	Phe	Gly	Asp	Tyr	Gln	Asp	Gly	Tyr	Tyr	Ser	Val	Gln	Thr	Thr	Glu
	370					375				380					
Gly	Glu	Gln	Ile	Ala	Gln	Leu	Ile	Ala	Gly	Tyr	Ile	Asp	Ile	Ile	Leu
385					390					395					400
Lys	Lys	Lys	Lys	Ser	Lys	Asp	His	Phe	Gly	Leu	Glu	Gly	Asp	Glu	Glu
				405					410				415		
Ser	Thr	Met	Leu	Glu	Asp	Ser	Val	Ser	Pro	Lys	Lys	Ser	Thr	Val	Leu
			420					425					430		
Gln	Gln	Gln	Tyr	Asn	Arg	Val	Gly	Lys	Val	Glu	His	Gly	Ser	Val	Ala
		435					440					445			
Leu	Pro	Ala	Ile	Met	Arg	Ser	Gly	Ala	Ser	Gly	Pro	Glu	Asn	Phe	Gln
	450					455				460					
Val	Gly	Ser	Met	Pro	Pro	Ala	Gln	Gln	Gln	Ile	Thr	Ser	Gly	Gln	Met
465					470					475					480
His	Arg	Gly	His	Met	Pro	Pro	Leu	Thr	Ser	Ala	Gln	Gln	Ala	Leu	Thr
				485					490					495	
Gly	Thr	Ile	Asn	Ser	Ser	Met	Gln	Ala	Val	Gln	Ala	Ala	Gln	Ala	Thr
			500					505					510		
Leu	Asp	Asp	Phe	Asp	Thr	Leu	Pro	Pro	Leu	Gly	Gln	Asp	Ala	Ala	Ser
	515						520					525			
Lys	Ala	Trp	Arg	Lys	Asn	Lys	Met	Asp	Glu	Ser	Lys	His	Glu	Ile	His
	530					535				540					
Ser	Gln	Val	Asp	Ala	Ile	Thr	Ala	Gly	Thr	Ala	Ser	Val	Val	Asn	Leu
545					550					555					560
Thr	Ala	Gly	Asp	Pro	Ala	Glu	Thr	Asp	Tyr	Thr	Ala	Val	Gly	Cys	Ala
			565					570					575		
Val	Thr	Thr	Ile	Ser	Ser	Asn	Leu	Thr	Glu	Met	Ser	Arg	Gly	Val	Lys
			580					585					590		
Leu	Leu	Ala	Ala	Leu	Leu	Glu	Asp	Glu	Gly	Gly	Ser	Gly	Arg	Pro	Leu
		595				600						605			
Leu	Gln	Ala	Ala	Lys	Gly	Leu	Ala	Gly	Ala	Val	Ser	Glu	Leu	Leu	Arg
	610					615				620					
Ser	Ala	Gln	Pro	Ala	Ser	Ala	Glu	Pro	Arg	Gln	Asn	Leu	Leu	Gln	Ala
625					630					635					640
Ala	Gly	Asn	Val	Gly	Gln	Ala	Ser	Gly	Glu	Leu	Leu	Gln	Gln	Ile	Gly
			645					650					655		
Glu	Ser	Asp	Thr	Asp	Pro	His	Phe	Gln	Asp	Ala	Leu	Met	Gln	Leu	Ala
		660						665					670		
Lys	Ala	Val	Ala	Ser	Ala	Ala	Ala	Ala	Leu	Val	Leu	Lys	Ala	Lys	Ser
	675						680					685			
Val	Ala	Gln	Arg	Thr	Glu	Asp	Ser	Gly	Leu	Gln	Thr	Gln	Val	Ile	Ala
	690					695				700					
Ala	Ala	Thr	Gln	Cys	Ala	Leu	Ser	Thr	Ser	Gln	Leu	Val	Ala	Cys	Thr
705					710					715					720
Lys	Val	Val	Ala	Pro	Thr	Ile	Ser	Ser	Pro	Val	Cys	Gln	Glu	Gln	Leu
			725					730					735		
Val	Glu	Ala	Gly	Arg	Leu	Val	Ala	Lys	Ala	Val	Lys	Gly	Cys	Val	Ser



740							745				750				
Ala	Ser	Gln	Ala	Ala	Thr	Glu	Asp	Gly	Gln	Leu	Leu	Arg	Gly	Val	Gly
755							760				765				
Ala	Ala	Ala	Thr	Ala	Val	Thr	Gln	Ala	Leu	Asn	Glu	Leu	Leu	Gln	His
770							775				780				
Val	Lys	Ala	His	Ala	Thr	Gly	Ala	Gly	Pro	Ala	Gly	Arg	Tyr	Asp	Gln
785							790				795				
Ala	Thr	Asp	Thr	Ile	Leu	Thr	Val	Thr	Glu	Asn	Ile	Phe	Ser	Ser	Met
805							810				815				
Gly	Asp	Ala	Gly	Glu	Met	Val	Arg	Gln	Ala	Arg	Ile	Leu	Ala	Gln	Ala
820							825				830				
Thr	Ser	Asp	Leu	Val	Asn	Ala	Ile	Lys	Ala	Asp	Ala	Glu	Gly	Glu	Ser
835							840				845				
Asp	Leu	Glu	Asn	Ser	Arg	Lys	Leu	Leu	Ser	Ala	Ala	Lys	Ile	Leu	Ala
850							855				860				
Asp	Ala	Thr	Ala	Lys	Met	Val	Glu	Ala	Ala	Lys	Gly	Ala	Ala	Ala	His
865							870				875				
Pro	Asp	Ser	Glu	Glu	Gln	Gln	Gln	Arg	Leu	Arg	Glu	Ala	Ala	Glu	Gly
885							890				895				
Leu	Arg	Met	Ala	Thr	Asn	Ala	Ala	Ala	Gln	Asn	Ala	Ile	Lys	Lys	Lys
900							905				910				
Leu	Val	Gln	Arg	Leu	Glu	His	Ala	Ala	Lys	Gln	Ala	Ala	Ala	Ser	Ala
915							920				925				
Thr	Gln	Thr	Ile	Ala	Ala	Ala	Gln	His	Ala	Ala	Ser	Ala	Pro	Lys	Ala
930							935				940				
Ser	Ala	Gly	Pro	Gln	Pro	Leu	Leu	Val	Gln	Ser	Cys	Lys	Ala	Val	Ala
945							950				955				
Glu	Gln	Ile	Pro	Leu	Leu	Val	Gln	Gly	Val	Arg	Gly	Ser	Gln	Ala	Gln
965							970				975				
Pro	Asp	Ser	Pro	Ser	Ala	Gln	Leu	Ala	Leu	Ile	Ala	Ala	Ser	Gln	Ser
980							985				990				
Phe	Leu	Gln	Pro	Gly	Gly	Lys	Met	Val	Ala	Ala	Ala	Lys	Ala	Ser	Val
995							1000				1005				
Pro	Thr	Ile	Gln	Asp	Gln	Ala	Ser	Ala	Met	Gln	Leu	Ser	Gln	Cys	Ala
1010							1015				1020				
Lys	Asn	Leu	Gly	Thr	Ala	Leu	Ala	Glu	Leu	Arg	Thr	Ala	Ala	Gln	Lys
1025							1030				1035				
Ala	Gln	Glu	Ala	Cys	Gly	Pro	Leu	Glu	Met	Asp	Ser	Ala	Leu	Ser	Val
1045							1050				1055				
Val	Gln	Asn	Leu	Glu	Lys	Asp	Leu	Gln	Glu	Val	Lys	Ala	Ala	Ala	Arg
1060							1065				1070				
Asp	Gly	Lys	Leu	Lys	Pro	Leu	Pro	Gly	Glu	Thr	Met	Glu	Lys	Cys	Thr
1075							1080				1085				
Gln	Asp	Leu	Gly	Asn	Ser	Thr	Lys	Ala	Val	Ser	Ser	Ala	Ile	Ala	Gln
1090							1095				1100				
Leu	Leu	Gly	Glu	Val	Ala	Gln	Gly	Asn	Glu	Asn	Tyr	Ala	Gly	Ile	Ala
1105							1110				1115				
Ala	Arg	Asp	Val	Ala	Gly	Gly	Leu	Arg	Ser	Leu	Ala	Gln	Ala	Ala	Arg
1125							1130				1135				
Gly	Val	Ala	Ala	Leu	Thr	Ser	Asp	Pro	Ala	Val	Gln	Ala	Ile	Val	Leu
1140							1145				1150				
Asp	Thr	Ala	Ser	Asp	Val	Leu	Asp	Lys	Ala	Ser	Ser	Leu	Ile	Glu	Glu
1155							1160				1165				
Ala	Lys	Lys	Ala	Ala	Gly	His	Pro	Gly	Asp	Pro	Glu	Ser	Gln	Gln	Arg

1170	1175	1180
Leu Ala Gln Val Ala Lys Ala Val Thr Gln Ala Leu Asn Arg Cys Val		
1185	1190	1195
Ser Cys Leu Pro Gly Gln Arg Asp Val Asp Asn Ala Leu Arg Ala Val		1200
1205	1210	1215
Gly Asp Ala Ser Lys Arg Leu Leu Ser Asp Ser Leu Pro Pro Ser Thr		
1220	1225	1230
Gly Thr Phe Gln Glu Ala Gln Ser Arg Leu Asn Glu Ala Ala Ala Gly		
1235	1240	1245
Leu Asn Gln Ala Ala Thr Glu Leu Val Gln Ala Ser Arg Gly Thr Pro		
1250	1255	1260
Gln Asp Leu Ala Arg Ala Ser Gly Arg Phe Gly Gln Asp Phe Ser Thr		
1265	1270	1275
Phe Leu Glu Ala Gly Val Glu Met Ala Gly Gln Ala Pro Ser Gln Glu		1280
1285	1290	1295
Asp Arg Ala Gln Val Val Ser Asn Leu Lys Gly Ile Ser Met Ser Ser		
1300	1305	1310
Ser Lys Leu Leu Leu Ala Ala Lys Ala Leu Ser Thr Asp Pro Ala Ala		
1315	1320	1325
Pro Asn Leu Lys Ser Gln Leu Ala Ala Ala Arg Ala Val Thr Asp		
1330	1335	1340
Ser Ile Asn Gln Leu Ile Thr Met Cys Thr Gln Gln Ala Pro Gly Gln		
1345	1350	1355
Lys Glu Cys Asp Asn Ala Leu Arg Glu Leu Glu Thr Val Arg Glu Leu		1360
1365	1370	1375
Leu Glu Asn Pro Val Gln Pro Ile Asn Asp Met Ser Tyr Phe Gly Cys		
1380	1385	1390
Leu Asp Ser Val Met Glu Asn Ser Lys Val Leu Gly Glu Ala Met Thr		
1395	1400	1405
Gly Ile Ser Gln Asn Ala Lys Asn Gly Asn Leu Pro Glu Phe Gly Asp		
1410	1415	1420
Ala Ile Ser Thr Ala Ser Lys Ala Leu Cys Gly Phe Thr Glu Ala Ala		
1425	1430	1435
Ala Gln Ala Ala Tyr Leu Val Gly Val Ser Asp Pro Asn Ser Gln Ala		1440
1445	1450	1455
Gly Gln Gln Gly Leu Val Glu Pro Thr Gln Phe Ala Arg Ala Asn Gln		
1460	1465	1470
Ala Ile Gln Met Ala Cys Gln Ser Leu Gly Glu Pro Gly Cys Thr Gln		
1475	1480	1485
Ala Gln Val Leu Ser Ala Ala Thr Ile Val Ala Lys His Thr Ser Ala		
1490	1495	1500
Leu Cys Asn Ser Cys Arg Leu Ala Ser Ala Arg Thr Thr Asn Pro Thr		
1505	1510	1515
Ala Lys Arg Gln Phe Val Gln Ser Ala Lys Glu Val Ala Asn Ser Thr		1520
1525	1530	1535
Ala Asn Leu Val Lys Thr Ile Lys Ala Leu Asp Gly Ala Phe Thr Glu		
1540	1545	1550
Glu Asn Arg Ala Gln Cys Arg Ala Ala Thr Ala Pro Leu Leu Glu Ala		
1555	1560	1565
Val Asp Asn Leu Ser Ala Phe Ala Ser Asn Pro Glu Phe Ser Ser Ile		
1570	1575	1580
Pro Ala Gln Ile Ser Pro Glu Gly Arg Ala Ala Met Glu Pro Ile Val		
1585	1590	1595
Ile Ser Ala Lys Thr Met Leu Glu Ser Ala Gly Gly Leu Ile Gln Thr		1600

										1605					1610					1615				
Ala	Arg	Ala	Leu	Ala	Val	Asn	Pro	Arg	Asp	Pro	Pro	Ser	Trp	Ser	Val									
										1620					1625					1630				
Leu	Ala	Gly	His	Ser	Arg	Thr	Val	Ser	Asp	Ser	Ile	Lys	Lys	Leu	Ile									
										1635					1640					1645				
Thr	Ser	Met	Arg	Asp	Lys	Ala	Pro	Gly	Gln	Leu	Glu	Cys	Glu	Thr	Ala									
										1650					1655					1660				
Ile	Ala	Ala	Leu	Asn	Ser	Cys	Leu	Arg	Asp	Leu	Asp	Gln	Ala	Ser	Leu									
										1665					1670					1675				
Ala	Ala	Val	Ser	Gln	Gln	Leu	Ala	Pro	Arg	Glu	Gly	Ile	Ser	Gln	Glu									
										1685					1690					1695				
Ala	Leu	His	Thr	Gln	Met	Leu	Thr	Ala	Val	Gln	Glu	Ile	Ser	His	Leu									
										1700					1705					1710				
Ile	Glu	Pro	Leu	Ala	Asn	Ala	Ala	Arg	Ala	Glu	Ala	Ser	Gln	Leu	Gly									
										1715					1720					1725				
His	Lys	Val	Ser	Gln	Met	Ala	Gln	Tyr	Phe	Glu	Pro	Leu	Thr	Leu	Ala									
										1730					1735					1740				
Ala	Val	Gly	Ala	Ala	Ser	Lys	Thr	Leu	Ser	His	Pro	Gln	Gln	Met	Ala									
										1745					1750					1755				
Leu	Leu	Asp	Gln	Thr	Lys	Thr	Leu	Ala	Glu	Ser	Ala	Leu	Gln	Leu	Leu									
										1765					1770					1775				
Tyr	Thr	Ala	Lys	Glu	Ala	Gly	Gly	Asn	Pro	Lys	Gln	Ala	Ala	His	Thr									
										1780					1785					1790				
Gln	Glu	Ala	Leu	Glu	Glu	Ala	Val	Gln	Met	Met	Thr	Glu	Ala	Val	Glu									
										1795					1800					1805				
Asp	Leu	Thr	Thr	Thr	Leu	Asn	Glu	Ala	Ala	Ser	Ala	Ala	Gly	Val	Val									
										1810					1815					1820				
Gly	Gly	Met	Val	Asp	Ser	Ile	Thr	Gln	Ala	Ile	Asn	Gln	Leu	Asp	Glu									
										1825					1830					1835				
Gly	Pro	Met	Gly	Glu	Pro	Glu	Gly	Ser	Phe	Val	Asp	Tyr	Gln	Thr	Thr									
										1845					1850					1855				
Met	Val	Arg	Thr	Ala	Lys	Ala	Ile	Ala	Val	Thr	Val	Gln	Glu	Met	Val									
										1860					1865					1870				
Thr	Lys	Ser	Asn	Thr	Ser	Pro	Glu	Glu	Leu	Gly	Pro	Leu	Ala	Asn	Gln									
										1875					1880					1885				
Leu	Thr	Ser	Asp	Tyr	Gly	Arg	Leu	Ala	Ser	Glu	Ala	Lys	Pro	Ala	Ala									
										1890					1895					1900				
Val	Ala	Ala	Glu	Asn	Glu	Glu	Ile	Gly	Ser	His	Ile	Lys	His	Arg	Val									
										1905					1910					1915				
Gln	Glu	Leu	Gly	His	Gly	Cys	Ala	Ala	Leu	Val	Thr	Lys	Ala	Gly	Ala									
										1925					1930					1935				
Leu	Gln	Cys	Ser	Pro	Ser	Asp	Ala	Tyr	Thr	Lys	Lys	Glu	Leu	Ile	Glu									
										1940					1945					1950				
Cys	Ala	Arg	Arg	Val	Ser	Glu	Lys	Val	Ser	His	Val	Leu	Ala	Ala	Leu									
										1955					1960					1965				
Gln	Ala	Gly	Asn	Arg	Gly	Thr	Gln	Ala	Cys	Ile	Thr	Ala	Ala	Ser	Ala									
										1970					1975					1980				
Val	Ser	Gly	Ile	Ile	Ala	Asp	Leu	Asp	Thr	Thr	Ile	Met	Phe	Ala	Thr									
										1985					1990					1995				
Ala	Gly	Thr	Leu	Asn	Arg	Glu	Gly	Thr	Glu	Thr	Ser	Ala	Asp	His	Arg									
										2005					2010					2015				
Glu	Gly	Ile	Leu	Lys	Thr																			

2035	2040	2045
Gln Ser Ser Val Ala Thr	Ile Thr Arg Leu Ala Asp	Val Val Lys Leu
2050	2055	2060
Gly Ala Ala Ser Leu Gly	Ala Glu Asp Pro Glu Thr	Gln Val Val Leu
2065	2070	2075
Ile Asn Ala Val Lys Asp	Val Ala Lys Ala Leu Gly	Asp Leu Ile Ser
2085	2090	2095
Ala Thr Lys Ala Ala Ala	Gly Lys Val Gly Asp Asp	Pro Ala Val Trp
2100	2105	2110
Gln Leu Lys Asn Ser Ala	Lys Val Met Val Thr Asn	Val Thr Ser Leu
2115	2120	2125
Leu Lys Thr Val Lys Ala	Val Glu Asp Glu Ala Thr	Lys Gly Thr Arg
2130	2135	2140
Ala Leu Glu Ala Thr Thr	Glu His Ile Arg Gln Glu	Leu Ala Val Phe
2145	2150	2155
Cys Ser Pro Glu Pro Pro	Ala Lys Thr Ser Thr Pro	Glu Asp Phe Ile
2165	2170	2175
Arg Met Thr Lys Gly Ile	Thr Met Ala Thr Ala Lys	Ala Val Ala Ala
2180	2185	2190
Gly Asn Ser Cys Arg Gln	Glu Asp Val Ile Ala Thr	Ala Asn Leu Ser
2195	2200	2205
Arg Arg Ala Ile Ala Asp	Met Leu Arg Ala Cys Lys	Glu Ala Ala Tyr
2210	2215	2220
His Pro Glu Val Ala Pro	Asp Val Arg Leu Arg Ala	Leu His Tyr Gly
2225	2230	2235
Arg Glu Cys Ala Asn Gly	Tyr Leu Glu Leu Leu Asp	His Val Leu Leu
2245	2250	2255
Thr Leu Gln Lys Pro Ser	Pro Glu Leu Lys Gln Gln	Leu Thr Gly His
2260	2265	2270
Ser Lys Arg Val Ala Gly	Ser Val Thr Glu Leu Ile	Gln Ala Ala Glu
2275	2280	2285
Ala Met Lys Gly Thr Glu	Trp Val Asp Pro Glu Asp	Pro Thr Val Ile
2290	2295	2300
Ala Glu Asn Glu Leu Leu	Gly Ala Ala Ala Ile Glu	Ala Ala Ala
2305	2310	2315
Lys Lys Leu Glu Gln Leu	Lys Pro Arg Ala Lys Pro	Lys Glu Ala Asp
2325	2330	2335
Glu Ser Leu Asn Phe Glu	Glu Gln Ile Leu Glu Ala	Ala Lys Ser Ile
2340	2345	2350
Ala Ala Ala Thr Ser Ala	Leu Val Lys Ala Ala Ser	Ala Ala Gln Arg
2355	2360	2365
Glu Leu Val Ala Gln Gly	Lys Val Gly Ala Ile Pro	Ala Asn Ala Leu
2370	2375	2380
Asp Asp Gly Gln Trp Ser	Gln Gly Leu Ile Ser Ala	Ala Arg Met Val
2385	2390	2395
Ala Ala Ala Thr Asn Asn	Leu Cys Glu Ala Ala Asn	Ala Ala Val Gln
2405	2410	2415
Gly His Ala Ser Gln Glu	Lys Leu Ile Ser Ser Ala	Lys Gln Val Ala
2420	2425	2430
Ala Ser Thr Ala Gln Leu	Leu Val Ala Cys Lys Val	Lys Ala Asp Gln
2435	2440	2445
Asp Ser Glu Ala Met Lys	Arg Leu Gln Ala Ala Gly	Asn Ala Val Lys
2450	2455	2460
Arg Ala Ser Asp Asn Leu	Val Lys Ala Ala Gln Lys	Ala Ala Ala Phe

2465		2470		2475		2480									
Glu	Glu	Gln	Glu	Asn	Glu	Thr	Val	Val	Val	Lys	Glu	Lys	Met	Val	Gly
				2485					2490					2495	
Gly	Ile	Ala	Gln	Ile	Ile	Ala	Ala	Gln	Glu	Glu	Met	Leu	Arg	Lys	Glu
		2500						2505					2510		
Arg	Glu	Leu	Glu	Glu	Ala	Arg	Lys	Lys	Leu	Ala	Gln	Ile	Arg	Gln	Gln
	2515						2520					2525			
Gln	Tyr	Lys	Phe	Leu	Pro	Ser	Glu	Leu	Arg	Asp	Glu	His			
	2530					2535					2540				

&lt;210&gt; 1703

&lt;211&gt; 346

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1703

```

ggatcccgag gagaaaaatc ctctgttact tcatgggtca tgtgactgag aatcttttta
60
ggaatctgtg atggagaaga atgactcctc ttcttctctg agtcctgtag taatgcattc
120
tctgctctac ccttctccat gactgctgcc tggctctgtc tagccttgct ctgateccaca
180
ctgagctggc cttgagcagg gtgcacactg tacatgaaga caatggctgg tttctcactg
240
gactctcctt tcgctctgtg gaaccagtga tggcgctgaa ctggaggaag aggcagcatg
300
tgaatgactg tgccatccat ggccaccaag ttccctttct ctcgct
346

```

&lt;210&gt; 1704.

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1704

Met	Asp	Gly	Thr	Val	Ile	His	Met	Leu	Pro	Leu	Pro	Pro	Val	Gln	Arg
1				5				10					15		
His	His	Trp	Phe	Thr	Glu	Ala	Lys	Gly	Glu	Ser	Ser	Glu	Lys	Pro	Ala
		20					25					30			
Ile	Val	Phe	Met	Tyr	Arg	Cys	Asp	Pro	Ala	Gln	Gly	Gln	Leu	Ser	Val
	35					40				45					
Asp	Gln	Ser	Lys	Ala	Arg	Thr	Asp	Gln	Ala	Ala	Val	Met	Glu	Lys	Gly
	50				55					60					
Arg	Ala	Glu	Asn	Ala	Leu	Gln	Asp	Ser	Glu	Lys	Lys	Arg	Ser	His	
65				70				75				80			
Ser	Ser	Pro	Ser	Gln	Ile	Pro	Lys	Lys	Ile	Leu	Ser	His	Met	Thr	His
			85			90						95			
Glu	Val	Thr	Glu	Asp	Phe	Ser	Pro	Arg	Asp						
		100					105								

&lt;210&gt; 1705

&lt;211&gt; 377

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 1705  
 gtgcaccttt tctcaggact cgctcagaag gtccttctgg gaggacaatg gacaagacta  
 60  
 aaccatcaaa tccattctca atgggtcaaa ttccaaattt tcctgaaggg ctggcttcta  
 120  
 ctggtgctcc aatcgagttg cagaaaggta tacaggggtg agcaagtta tttaatcctg  
 180  
 gttttggctg gaaccaaagt ccacaagttc aaaccttgaa gaattctcaa ggttctattc  
 240  
 ataatttagt gaggtctgga gttactgttg aaaggaaagt taatgtaggg gcacaaggag  
 300  
 cttttaactc tgcccctgca ccacagatgg aatttccac agttcctcca tacaaccctc  
 360  
 cttccttcgg agctagc  
 377

<210> 1706  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 1706  
 Met Asp Lys Thr Lys Pro Ser Asn Pro Phe Ser Met Gly Gln Ile Pro  
 1 5 10 15  
 Asn Phe Pro Glu Gly Leu Ala Ser Thr Gly Ala Pro Ile Glu Leu Gln  
 20 25 30  
 Lys Gly Ile Gln Gly Gly Ala Ser Leu Phe Asn Pro Gly Phe Gly Trp  
 35 40 45  
 Asn Gln Asn Pro Gln Val Gln Thr Leu Lys Asn Ser Gln Gly Ser Ile  
 50 55 60  
 His Asn Leu Val Arg Ser Gly Val Thr Val Glu Arg Lys Val Asn Val  
 65 70 75 80  
 Gly Ala Gln Gly Ala Phe Asn Ser Ala Pro Ala Pro Gln Met Glu Phe  
 85 90 95  
 Pro Thr Val Pro Pro Tyr Asn Pro Ser Ser Phe Gly Ala Ser  
 100 105 110

<210> 1707  
 <211> 427  
 <212> DNA  
 <213> Homo sapiens

<400> 1707  
 nnttcggtga acccgaagcc cggacgcagc gccgataccc atgtgcgccc agtactacgc  
 60  
 catcacgcca agcgagtgt catcatcggg gccgggctag ccggcatgga ggctgcgcca  
 120  
 gttctcagcg aacgcgcaca cgaacctctc atcgtcgagg ccagcgacca cattggcgga  
 180  
 gtcaccttg cgggtggtca accttcttc aaggaggacg acctagctct gctggagtgg  
 240  
 taccgcacca ccctggagga gttgggcgtg gagattcgac tcaacaccac cgtaacggct  
 300

gatcttatacg cttccttcgg ggccgatcac gtcgtcctgg cgaccggatc gaggcgcgt  
 360  
 cgactcgacc taggtgatga tgccaaggtc attgacgcca ccgacgctct gctcaaccgc  
 420  
 gacgcgt  
 427

<210> 1708  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 1708  
 Xaa Ser Val Asn Pro Lys Pro Gly Arg Ser Ala Asp Thr His Val Arg  
 1 5 10 15  
 Pro Val Leu Arg His His Ala Lys Arg Val Leu Ile Ile Gly Ala Gly  
 20 25 30  
 Leu Ala Gly Met Glu Ala Ala Arg Val Leu Ser Glu Arg Ala His Glu  
 35 40 45  
 Pro Leu Ile Val Glu Ala Ser Asp His Ile Gly Gly Val Ile Leu Ala  
 50 55 60  
 Gly Gly Gln Pro Ser Phe Lys Glu Asp Asp Leu Ala Leu Leu Glu Trp  
 65 70 75 80  
 Tyr Arg Thr Thr Leu Glu Glu Leu Gly Val Glu Ile Arg Leu Asn Thr  
 85 90 95  
 Thr Val Thr Ala Asp Leu Ile Ala Ser Phe Gly Ala Asp His Val Val  
 100 105 110  
 Leu Ala Thr Gly Ser Arg Pro Arg Arg Leu Asp Leu Gly Asp Asp Ala  
 115 120 125  
 Lys Val Ile Asp Ala Thr Asp Ala Leu Leu Asn Arg Asp Ala  
 130 135 140

<210> 1709  
 <211> 446  
 <212> DNA  
 <213> Homo sapiens

<400> 1709  
 acgcgtgaag gggaccagga gggtggacac agaccattgc aatggaaatg atgatttaga  
 60  
 ctgttctttt ctgactgatg actgggagtc agggaagatg aatgcagagt ctgtgatcac  
 120  
 ctctctcttc agccacatca tatctcagcc tcctggagga aactcccata gcttgtctct  
 180  
 tcagtcccag ttgacagctt ctgaacgttt ccaagagaat agttcggatc attcagaaac  
 240  
 cagggttggtg caagaggctt tctttcaggc aatcctgctt gctgtgtgct taatcatttc  
 300  
 tgcattgtgca agatgggtta tgggagaaat attagccagt gtcttcacat gctcattgat  
 360  
 gataactgta gcttatgtga aatcattggt tctcagcctt gccagctatt tcaaaaccac  
 420  
 tgctgtgct cggtttgtca aaattt  
 446

<210> 1710  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 1710  
 Met Asn Ala Glu Ser Val Ile Thr Ser Ser Ser Ser His Ile Ile Ser  
 1 5 10 15  
 Gln Pro Pro Gly Gly Asn Ser His Ser Leu Ser Leu Gln Ser Gln Leu  
 20 25 30  
 Thr Ala Ser Glu Arg Phe Gln Glu Asn Ser Ser Asp His Ser Glu Thr  
 35 40 45  
 Arg Leu Leu Gln Glu Val Phe Phe Gln Ala Ile Leu Leu Ala Val Cys  
 50 55 60  
 Leu Ile Ile Ser Ala Cys Ala Arg Trp Val Met Gly Glu Ile Leu Ala  
 65 70 75 80  
 Ser Val Phe Thr Cys Ser Leu Met Ile Thr Val Ala Tyr Val Lys Ser  
 85 90 95  
 Leu Phe Leu Ser Leu Ala Ser Tyr Phe Lys Thr Thr Ala Cys Ala Arg  
 100 105 110  
 Phe Val Lys Ile  
 115

<210> 1711  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

<400> 1711  
 nggggggattc atgttagtat ttgtcagaaa aggccttttga aagagccaaa ttaaaaagag  
 60  
 cactagaaca tgaacaggga aagcagagga aatacttgta gaaagtattt ttacagctc  
 120  
 cctcaataca attcagtaat gttcattcct ggtgagaagt ctgtccgcac acacagcatc  
 180  
 agccaagcag cagaagcagt ggtgtctggg gggctgggaa gtttttcccc caaataccca  
 240  
 ccccatgcac tgcccagtc ccagacccca aagactttgt cctcgcctca cgcacctttt  
 300  
 gcaggctcac actgtctgtg tgcgcaagag gtagcgacag gagacaatgg ggaaagagct  
 360  
 gaaggaggca aacaaggcca gggggaaagc ctacctcgag gcacagaggg gcccgaagat  
 420  
 ggatat  
 426

<210> 1712  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1712  
 Met Asn Arg Glu Ser Arg Gly Asn Thr Cys Arg Lys Tyr Phe Leu Gln



```

      1             5             10             15
Leu Pro Gln Tyr Asn Ser Val Met Phe Ile Pro Gly Glu Lys Ser Val
      20             25             30
Arg Thr His Ser Ile Ser Gln Ala Ala Glu Ala Val Val Ser Gly Gly
      35             40             45
Leu Gly Ser Phe Ser Pro Lys Tyr Pro Pro His Ala Leu Pro Ser Pro
      50             55             60
Gln Thr Pro Lys Thr Leu Ser Ser Pro His Ala Pro Phe Ala Gly Ser
      65             70             75             80
His Cys Leu Cys Ala Gln Glu Val Ala Thr Gly Asp Asn Gly Glu Arg
      85             90             95
Ala Glu Gly Gly Lys Gln Gly Gln Gly Glu Ser Leu Pro Arg Gly Thr
      100             105             110
Glu Gly Pro Gln Asp Gly Tyr
      115

```

<210> 1713  
 <211> 328  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1713
tctagaaagg tttatttcat gggccaaggc ttgtgtttcc aaagccagga agggctgaag
60
ccagaattgg ccttggtgc ttgccacaga gtctggccgg gggaccctgg acctcagcag
120
ggtcatgatg aggtcagctt tggaggagca gggccagcgt gtctgtcttt ctgctcctgg
180
aatgagcctc actccctccc tgetcaaggc agcccttcac ccagccgccg ggacaggtgc
240
cctgtgccac ctgccatccc tgggattctc catctcagtg agtgctccct ggggcctggg
300
aacgcattctg gctggtgact cctggggg
328

```

<210> 1714  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1714
Met Gly Gln Gly Leu Cys Phe Gln Ser Gln Glu Gly Leu Lys Pro Glu
      1             5             10             15
Leu Ala Leu Ala Ala Cys His Arg Val Trp Pro Gly Asp Pro Gly Pro
      20             25             30
Gln Gln Gly His Asp Glu Val Ser Phe Gly Gly Ala Gly Pro Ala Cys
      35             40             45
Pro Ala Phe Cys Ser Trp Asn Glu Pro His Ser Leu Pro Ala Gln Gly
      50             55             60
Ser Pro Ser Pro Ser Arg Arg Asp Arg Cys Pro Val Pro Pro Ala Ile
      65             70             75             80
Pro Gly Ile Leu His Leu Ser Glu Cys Ser Leu Gly Pro Gly Asn Ala
      85             90             95
Ser Gly Trp

```

<210> 1715  
 <211> 489  
 <212> DNA  
 <213> Homo sapiens

<400> 1715  
 gttgccagcg atgggccgca tttgtacatc ccggtatttc gtgttcggtg tgggtgtaaaa  
 60  
 gatgccccat gtgtgacatt ctgtggatag ttattgttag cattatttga caagttctag  
 120  
 aaatcgatcc acccaggcgt gtagctgcgg tatttcatca gagttgatcg ttgcgatgag  
 180  
 ttgatcatgg cctgtcatgg cgtagtcttc tacgtcgtaa agtatgagac aatccacggt  
 240  
 aatatggtgt tttttggcca actcgggaagc cggggtgtcg ggggaagtcgg tccctgtaag  
 300  
 gtatgggcct gtcccaatga cgacgtgtgc tgggtccatg aggagttcgt ccaaggttcg  
 360  
 aactcattac cgtcgaatac gacgctgtcg ccacgcggcg tgcgaatcg aatcctcaaa  
 420  
 gtgtatccgt actcgggtgc gcgcaacagg tgccctaacct cagcgcctagt gggctgtgca  
 480  
 ctgacgcgt  
 489

<210> 1716  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 1716  
 Met Ala Cys His Gly Val Val Phe Tyr Val Val Lys Tyr Glu Thr Ile  
 1 5 10 15  
 His Gly Asn Met Val Phe Phe Gly Gln Leu Gly Ser Arg Gly Val Gly  
 20 25 30  
 Glu Val Gly Pro Cys Lys Val Trp Ala Cys Pro Asn Asp Asp Val Cys  
 35 40 45  
 Trp Val His Glu Glu Phe Val Gln Gly Ser Asn Ser Leu Pro Ser Asn  
 50 55 60  
 Thr Thr Leu Ser Pro Ser Ala Val Ser Asn Arg Ile Leu Lys Val Tyr  
 65 70 75 80  
 Pro Tyr Ser Val Ser Arg Asn Arg Cys Leu Thr Ser Ala Leu Val Gly  
 85 90 95  
 Cys Ala Leu Thr Arg  
 100

<210> 1717  
 <211> 312  
 <212> DNA  
 <213> Homo sapiens

<400> 1717

nggcatacaa cggagtaaaa accacatcaa cagaagtgga aacaggccca gagagcgtga  
 60  
 gaggtttctg gtttcaagaa ggcacactga gtcctgcac ccgatgctc tcttcccca  
 120  
 aatcccactg gaatacacag agagacataa aaacaaggag tgtcctgtag cagagcagcc  
 180  
 aggctggctc atgagacaga gggagcagtc ttctgggaga catggctctt gctgctgagg  
 240  
 atcagccaac agatccatgg aaagcaaagg gcccttctcc ggaggcttcc tggggcctgc  
 300  
 catgaatgtg tc  
 312

<210> 1718

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1718

Met	Ala	Gly	Pro	Arg	Lys	Pro	Pro	Glu	Lys	Gly	Pro	Leu	Leu	Ser	Met
1				5				10						15	
Asp	Leu	Leu	Ala	Asp	Pro	Gln	Gln	Gln	Glu	Pro	Cys	Leu	Pro	Glu	Asp
			20					25					30		
Cys	Ser	Leu	Cys	Leu	Met	Ser	Gln	Pro	Gly	Cys	Ser	Ala	Thr	Gly	His
		35					40					45			
Ser	Leu	Phe	Leu	Cys	Leu	Ser	Val	Tyr	Ser	Ser	Gly	Ile	Trp	Gly	Arg
	50					55					60				
Arg	Gly	Ile	Gly	Cys	Arg	Asp	Ser	Val	Cys	Leu	Leu	Glu	Thr	Arg	Asn
65					70					75					80
Leu	Ser	Arg	Ser	Leu	Gly	Leu	Phe	Pro	Leu	Leu	Leu	Met	Trp	Phe	Leu
			85					90						95	
Leu	Arg	Cys	Met	Pro											
			100												

<210> 1719

<211> 404

<212> DNA

<213> Homo sapiens

<400> 1719

tgatcaccac ggccctgccca ttttttgtcg ggaccgcaga ccgatgctg cccctcgaag  
 60  
 tcagagacaa tccaaccggc ctgcaaaact gcggtcttgc ccggggcaac gtcgtagggt  
 120  
 ccaacagttt ctccaacctc ataggtagaa gaagtgtat agctgctgga aatggagatg  
 180  
 tggatcacat cgagcagtgga gaagtcaatg cctgccgaaa ccgaccagtt cttcgtotta  
 240  
 gtttctgtga tggatcgctg gaccggctgc ggagtgtcgt tgagttggaa atcgtcacgt  
 300  
 cccagcagag ccatcgaagt agctgcgcac cacatgaacg ggctgtccgt gtcaccggga  
 360  
 ttcgagcagg gagcacccat tggtngtggg tgcctccggg gggt  
 404

<210> 1720  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 1720  
 Met Gly Ala Pro Cys Ser Asn Pro Gly Asp Thr Asp Ser Pro Phe Met  
 1 5 10 15  
 Trp Cys Ala Ala Thr Ser Met Ala Leu Gly Arg Asp Asp Phe Gln  
 20 25 30  
 Leu Asn Asp Thr Pro Gln Pro Val Thr Arg Ser Ile Thr Glu Thr Lys  
 35 40 45  
 Thr Lys Asn Trp Ser Val Ser Ala Gly Ile Asp Phe Pro Leu Leu Asp  
 50 55 60  
 Val Ile His Ile Ser Ile Ser Ser Ser Tyr Ser Thr Ser Ser Thr Tyr  
 65 70 75 80  
 Glu Val Gly Glu Thr Val Gly Pro Tyr Asp Val Ala Pro Gly Lys Thr  
 85 90 95  
 Ala Val Leu Gln Ala Gly Trp Ile Val Ser Asp Phe Glu Gly Gln His  
 100 105 110  
 Thr Val Cys Gly Pro Asp Lys Lys Trp Gln Gly Arg Gly Asp  
 115 120 125

<210> 1721  
 <211> 529  
 <212> DNA  
 <213> Homo sapiens

<400> 1721  
 ccatggccac cctttcagga cagagctgcc cttcccatgc tggaggagcc acagggcctg  
 60  
 gtcgctgtgg cttcagcctc ccagctcctc ctgtcctctg ctgggcactt gtaatgtcca  
 120  
 ggcactccct gcttggatca ggggatctgg gtttcattct cccagctcct cctgtcctct  
 180  
 gctgggcacc tgtgatgtcc aggcactccc tgcctggatt gggggatctg ggtttcatct  
 240  
 tcccagctcc tcctgtcctc cgcctgggcac ctgtgatgtc caggcactcc ctgcttggat  
 300  
 cgggggggtct ggggtttgtg ctatacttgg tgcctccttt cactcaggcc ccttcttgac  
 360  
 tctgcagagc taccctcgc catctcttcc acgcgggcct cctgcagtct ctgtgctcac  
 420  
 cctgtgactc tgcttcgggt gttgtcaaata gggggtcac ccaggacccg caccactggg  
 480  
 tcgtgtgcag gtttctgggg tggcagagtg cggatgagtg ggcacgcgt  
 529

<210> 1722  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1722

```

Met Ala Thr Leu Ser Gly Gln Ser Cys Pro Ser His Ala Gly Gly Ala
 1           5           10           15
Thr Gly Pro Gly Arg Cys Gly Phe Ser Leu Pro Ala Pro Pro Val Leu
          20           25           30
Cys Trp Ala Leu Val Met Ser Arg His Ser Leu Leu Gly Ser Gly Asp
          35           40           45
Leu Gly Phe Ile Phe Pro Ala Pro Pro Val Leu Cys Trp Ala Pro Val
          50           55           60
Met Ser Arg His Ser Leu Leu Gly Leu Gly Asp Leu Gly Phe Ile Phe
65           70           75           80
Pro Ala Pro Pro Val Leu Arg Trp Ala Pro Val Met Ser Arg His Ser
          85           90           95
Leu Leu Gly Ser Gly Gly Leu Gly Phe Val Leu Tyr Leu Val Leu Pro
          100          105          110
Phe Thr Gln Ala Pro Ser
          115

```

&lt;210&gt; 1723

&lt;211&gt; 371

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1723

```

acgcgtttga agctggatgc atggatatcc agcgcgcgcca tcgggtcaaa tgggttgacg
60
ctgcccttga tggtcaccgg ggcgtagcga tctaccttac cgttgatgtc gacgctcgcc
120
ggtttggcct ggcggctgtc aatggtgcc aatcttccgt tgagttgttg aatggcagtg
180
gcaaagttag gcgtgaggct gaagtcggcg aagttggccg agccatcatt gatcgcaacc
240
tgcccaatgt gaatgccagc tggcttctct ttgctggccg ccggctgtct tgttgccagt
300
gtcggccggg tgcgggatca gcaagtcatc gatgttggtg ggcgggtcat cggatgatcg
360
tgcattcaat a
371

```

&lt;210&gt; 1724

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1724

```

Met Asp Ile Gln Arg Arg His Arg Val Lys Trp Val Asp Ala Ala Leu
 1           5           10           15
Asp Gly His Arg Gly Val Ala Ile Tyr Leu Thr Val Asp Val Asp Ala
          20           25           30
Arg Arg Phe Gly Leu Ala Ala Val Asn Gly Ala Asn Leu Pro Val Glu
          35           40           45
Leu Leu Asn Gly Ser Gly Lys Val Gly Arg Glu Ala Glu Val Gly Glu
          50           55           60
Val Gly Arg Ala Ile Ile Asp Arg Asn Leu Pro Asn Val Asn Ala Gln

```

```

65          70          75          80
Trp Leu Leu Phe Ala Gly Arg Arg Leu Ser Cys Cys Gln Cys Arg Pro
          85          90          95
Gly Ala Gly Ser Ala Ser His Arg Cys Trp Trp Gly Gly His Arg
          100          105          110

```

<210> 1725  
 <211> 807  
 <212> DNA  
 <213> Homo sapiens

<400> 1725  
 ngtgcacctg gtatgggtgcc ctctgggtct aagcctgtcc ttgtacacac tcacactttg  
 60  
 atttgaagtg acctcttccc tctgagcctt ctgggtgtcca actctcccct tctctaggac  
 120  
 catgcagtgc tggaggccga gaggcagaag atgtcagccc ttgtgcgagg gctgcagagg  
 180  
 gagctggagg agacttcaga ggagacaggg cattggcaga gtatgttcca gaagaacaag  
 240  
 gaggatctta gagccaccaa gcaggaaactc ctgcagctgc gaatggagaa ggaggagatg  
 300  
 gaagaggagc ttggagagaa gatagaggtc ttgcagaggg aattagagca ggcccagact  
 360  
 agtctggag atactcgcca ggttgagggtg ctcaagaagg agctgctccg gacacaggag  
 420  
 gagcttaagg aactgcaggc agaacggcag agccaggagg tggctgggag acaccgggac  
 480  
 cgggagttgg agaagcagct ggcggtcctg agggtcgagg ctgatcgagg tcgggagctg  
 540  
 gaagaacaga acctccagct acaaaagacc ctccgcaat tgcgacagga ctgtgaagag  
 600  
 gcttccaagg ctaagatggt ggccgaggca gaggaacag tgctggggca gcggcgggcc  
 660  
 gcagtggaga cgacgtctcg ggagaccag gaggaatat acgaattccg cgggcgcacg  
 720  
 ctgggttttg agcagcagct gaaggagact cgaggtctgg tggatggtgg ggaagcggtg  
 780  
 gaggcacgac tacgggacaa gctgcag  
 807

<210> 1726  
 <211> 230  
 <212> PRT  
 <213> Homo sapiens

<400> 1726  
 Asp His Ala Val Leu Glu Ala Glu Arg Gln Lys Met Ser Ala Leu Val  
 1 5 10 15  
 Arg Gly Leu Gln Arg Glu Leu Glu Thr Ser Glu Glu Thr Gly His  
 20 25 30  
 Trp Gln Ser Met Phe Gln Lys Asn Lys Glu Asp Leu Arg Ala Thr Lys  
 35 40 45  
 Gln Glu Leu Leu Gln Leu Arg Met Glu Lys Glu Glu Met Glu Glu Glu

```

      50              55              60
Leu Gly Glu Lys Ile Glu Val Leu Gln Arg Glu Leu Glu Gln Ala Arg
65              70              75              80
Ala Ser Ala Gly Asp Thr Arg Gln Val Glu Val Leu Lys Lys Glu Leu
      85              90              95
Leu Arg Thr Gln Glu Glu Leu Lys Glu Leu Gln Ala Glu Arg Gln Ser
      100             105             110
Gln Glu Val Ala Gly Arg His Arg Asp Arg Glu Leu Glu Lys Gln Leu
      115             120             125
Ala Val Leu Arg Val Glu Ala Asp Arg Gly Arg Glu Leu Glu Glu Gln
      130             135             140
Asn Leu Gln Leu Gln Lys Thr Leu Gln Gln Leu Arg Gln Asp Cys Glu
145             150             155             160
Glu Ala Ser Lys Ala Lys Met Val Ala Glu Ala Glu Ala Thr Val Leu
      165             170             175
Gly Gln Arg Arg Ala Ala Val Glu Thr Thr Leu Arg Glu Thr Gln Glu
      180             185             190
Glu Asn Asp Glu Phe Arg Arg Arg Ile Leu Gly Leu Glu Gln Gln Leu
      195             200             205
Lys Glu Thr Arg Gly Leu Val Asp Gly Gly Glu Ala Val Glu Ala Arg
      210             215             220
Leu Arg Asp Lys Leu Gln
225             230

```

&lt;210&gt; 1727

&lt;211&gt; 474

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1727

```

aaccaactct ccacaacatc gccagaaaca gtcgctgccca agaggctcca ccatgtttta
60
gcagcttcag aagacaaaga taagatgaaa aaggaagttt tacaaagctc aagggacatt
120
atgcaatcca aatcagcttg cgaaattaaa caaagtcacc aagaatgtag tacccaacaa
180
acacaacaga agaagtatct ggagcagttg cacttgcccc aaagcaaacc aatttcccca
240
aatttcaaag ttaaaacat caaacttcca actctagatc atacattaaa tgaaacagac
300
cacagctatg aaagtcataa acagcaatct gagattgatg ttcaaacctt taccaaaaaa
360
caatatctga aaaccaagaa aactgaagca agcactgaat gtagtcataa gcaatctctg
420
gctgaaagac attatcagtt acctaagaag gagaaaagag tgacagtaca attg
474

```

&lt;210&gt; 1728

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1728

Met Lys Lys Glu Val Leu Gln Ser Ser Arg Asp Ile Met Gln Ser Lys

```

      1             5             10             15
Ser Ala Cys Glu Ile Lys Gln Ser His Gln Glu Cys Ser Thr Gln Gln
      20             25             30
Thr Gln Gln Lys Lys Tyr Leu Glu Gln Leu His Leu Pro Gln Ser Lys
      35             40             45
Pro Ile Ser Pro Asn Phe Lys Val Lys Thr Ile Lys Leu Pro Thr Leu
      50             55             60
Asp His Thr Leu Asn Glu Thr Asp His Ser Tyr Glu Ser His Lys Gln
      65             70             75             80
Gln Ser Glu Ile Asp Val Gln Thr Phe Thr Lys Lys Gln Tyr Leu Lys
      85             90             95
Thr Lys Lys Thr Glu Ala Ser Thr Glu Cys Ser His Lys Gln Ser Leu
      100            105            110
Ala Glu Arg His Tyr Gln Leu Pro Lys Lys Glu Lys Arg Val Thr Val
      115            120            125
Gln Leu
      130

```

&lt;210&gt; 1729

&lt;211&gt; 470

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1729

```

acgcgtgact cgccataaca ttgctgacac gttttccacg gcaagggagg catcatgacg
60
aggatcgacg tgtggctgtg gtcggtgcgc gtctataagt cccggtcggt ggctaccgcc
120
gccgtcaagg gcggccacat tcgcctcaat ggagaccggg ttaaaccctc ccacgacgtg
180
aaaccgggcg ataccgtcac catccacacc cccggatggg accgggtcct caaggtcac
240
aaccgatca cgaagagagt cggcgccaaa ctgcgggtcg aggttacga agatctgtca
300
nngcccccg acccgccctac ctctctgnct cccctcgccc gccgagaccg tggggctgga
360
cgaccaccca agaaggatcg tcgcgagatc gatcggtccc gagggcggga ctctcgctat
420
tgaggactct tcgcccggcc caacacacca cggctcgcgg ccgaattggc
470

```

&lt;210&gt; 1730

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1730

```

His Val Phe His Gly Lys Gly Gly Ile Met Thr Arg Ile Asp Val Trp
      1             5             10             15
Leu Trp Ser Val Arg Val Tyr Lys Ser Arg Ser Leu Ala Thr Ala Ala
      20             25             30
Val Lys Gly Gly His Ile Arg Leu Asn Gly Asp Pro Val Lys Pro Ser
      35             40             45
His Asp Val Lys Pro Gly Asp Thr Val Thr Ile His Thr Pro Gly Trp

```



```

      50              55              60
Asp Arg Val Leu Lys Val Ile Asn Pro Ile Thr Lys Arg Val Gly Ala
65              70              75              80
Lys Leu Ala Val Glu Ala Tyr Glu Asp Leu Ser Xaa Pro Pro Asp Pro
      85              90              95
Pro Thr Ser Leu Xaa Pro Leu Ala Arg Arg Asp Arg Gly Ala Gly Arg
      100              105              110
Pro Thr Lys Lys Asp Arg Arg Glu Ile Asp Arg Leu Arg Gly Arg Asp
      115              120              125
Ser Arg Tyr
      130

```

&lt;210&gt; 1731

&lt;211&gt; 534

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1731

```

agcgctccct gcctgctgct gggcggaggg aaggcggcaa gagctgcgga gcccctggaa
60
gagcttccag gaaccctgcy ctgtgggata aaggaatgag gttcagaaag gggcagggag
120
ttgcccgcag ccgcaccgca cgtcttcagc ccgaccgttg tcctgacctc tctgtcccg
180
ccccgccc gtctcaccat ggccttcttg acacagctga tgctgctgct ctggaagaat
240
ttcatgtatc gccggagaca gccgggccag ctctgggtcg aattgctgtg gcctctcttc
300
ctcttcttca tcctgggtggc tggtcgccac tcccaccgc cctgggagca ccatgaatgc
360
cacttcccaa acaagccact gccatcggcg ggcaccgtgc cctgggtcca ggggtctcatc
420
tgtaatgtga acaacacctg ctttccgcag ctgacaccgg gcgaggagcc cgggcgcctg
480
agcaacttca acgactccct ggtctcccgg ctgctacgtc ggagagaggc tgga
534

```

&lt;210&gt; 1732

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1732

```

Met Ala Phe Trp Thr Gln Leu Met Leu Leu Leu Trp Lys Asn Phe Met
1              5              10              15
Tyr Arg Arg Arg Gln Pro Val Gln Leu Leu Val Glu Leu Leu Trp Pro
      20              25              30
Leu Phe Leu Phe Phe Ile Leu Val Ala Val Arg His Ser His Pro Pro
      35              40              45
Leu Glu His His Glu Cys His Phe Pro Asn Lys Pro Leu Pro Ser Ala
      50              55              60
Gly Thr Val Pro Trp Leu Gln Gly Leu Ile Cys Asn Val Asn Asn Thr
65              70              75              80
Cys Phe Pro Gln Leu Thr Pro Gly Glu Glu Pro Gly Arg Leu Ser Asn

```

85                      90                      95  
 Phe Asn Asp Ser Leu Val Ser Arg Leu Leu Arg Arg Arg Glu Ala Gly  
 100                      105                      110

<210> 1733  
 <211> 409  
 <212> DNA  
 <213> Homo sapiens

<400> 1733  
 acgcgtgatg gccgatccga ctgtgcccgg tcacgaccgg cggcgtccga gtcctgaccc  
 60  
 ggacatgccg tggctgatcc gcgacatcac cctcggaac aacgtgatcg cgggcagcac  
 120  
 gggcaactgc accctctgcg tcgaggacta ctcgcgagg tacgcggcga ggatcctcaa  
 180  
 catcgtctcc gacggcaacg tcctgcagcg cgcacggcc gcacagccag cgtggctggt  
 240  
 tgggtgtggtc gcggggatca gcgaactccg atccgtacgt attctccagc ctcgacgctt  
 300  
 accgggagac cactgggttt taggaccttc gctcgggttc gatcgatggc gtgctgtcac  
 360  
 cgcggccgga gcgctgctcc cgggcattga tctcaaggcg gtcacgagg  
 409

<210> 1734  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

<400> 1734  
 Met Ala Asp Pro Thr Val Pro Gly His Asp Pro Arg Arg Pro Ser Pro  
 1                      5                      10                      15  
 Asp Pro Asp Met Pro Trp Leu Ile Arg Asp Ile Thr Leu Gly Asn Asn  
 20                      25                      30  
 Val Ile Ala Gly Ser Thr Gly Asn Cys Thr Leu Cys Val Glu Asp Tyr  
 35                      40                      45  
 Ser Arg Arg Tyr Ala Ala Arg Ile Leu Asn Ile Val Ser Asp Gly Asn  
 50                      55                      60  
 Val Leu Gln Arg Ala Ser Ala Ala Gln Pro Ala Trp Leu Val Gly Val  
 65                      70                      75                      80  
 Val Ala Gly Ile Ser Glu Leu Arg Ser Val Arg Ile Leu Gln Pro Arg  
 85                      90                      95  
 Arg Leu Pro Gly Asp His Trp Phe Leu Gly Pro Ser Leu Gly Leu Asp  
 100                      105                      110  
 Arg Trp Arg Ala Val Thr Ala Ala Gly Ala Leu Leu Pro Gly Ile Asp  
 115                      120                      125  
 Leu Lys Ala Val Thr Arg  
 130

<210> 1735  
 <211> 342  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1735

ggcgccatgg tcatcagcat catgtgttcg gcgcccgtg cacgaatgtt cgtgcgatca  
60  
agcgcgcctt ttagttcgac gcacggtaaa gcccgtgcgc atcgatgtag gccaggaccg  
120  
cgtcaggcac caggaaacgt accgacttcc cgctggccgg cagttgacgg atctgggtgg  
180  
cggacaccgc aagcggggtc tgccagacga atgcaatatt cccgttcggc ccggtcaggg  
240  
ccaaggggtc acttaccgac cgcgcggcca gcaggttgcg caaggcatcc ggcggttcgc  
300  
tggcggcatc cgggcgttgc aaaaccagga tgtggcaatg ct  
342

&lt;210&gt; 1736

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1736

Met	Val	Ile	Ser	Ile	Met	Cys	Ser	Ala	Pro	Ala	Ala	Arg	Met	Phe	Val
1				5					10					15	
Arg	Ser	Ser	Ala	Pro	Phe	Ser	Ser	Thr	His	Gly	Lys	Ala	Arg	Ala	His
			20					25					30		
Arg	Cys	Arg	Pro	Gly	Pro	Arg	Gln	Ala	Pro	Gly	Asn	Val	Pro	Thr	Ser
		35					40					45			
Arg	Trp	Pro	Ala	Val	Asp	Gly	Ser	Gly	Trp	Arg	Thr	Pro	Gln	Ala	Gly
	50					55				60					
Ser	Ala	Arg	Arg	Met	Gln	Tyr	Ser	Arg	Ser	Ala	Arg	Ser	Gly	Pro	Arg
65					70					75				80	
Gly	His	Leu	Pro	Thr	Ala	Arg	Pro	Ala	Gly	Cys	Ala	Arg	His	Pro	Ala
				85					90					95	
Val	Arg	Trp	Arg	His	Pro	Gly	Val	Ala	Lys	Pro	Gly	Cys	Gly	Asn	Ala
			100					105						110	

&lt;210&gt; 1737

&lt;211&gt; 506

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1737

acgcgtgttc accatgacct ggaccgcca gcggcccgac gggtcgagcg cggaggagtc  
60  
ggacgagacg actgtggtgg tccctgccat ctcagcgccc cacgggtacg acgtgcaggc  
120  
gtccggcgcc cagtcacct cccaccagg cgaccgggtg gcgcggttgc acctcaacca  
180  
aggcagtacc acggcgaagc tcacgatcac cctgcgctaa cccttcaagc gtcttcagca  
240  
ccgacctata agtctcccag acacttttac gaccggccct ccccttggg gtgggccccg  
300  
tccttttcgt gtcgtgggat gcacctggca gcaccacctc cggcccccac ggagaacagt  
360

aggtatcctc gcaggggtact acggccaagg catatttgac gttccacgct tgccactgcc  
 420  
 gtcttagggc catactgccg ccacgcagct gagacggtga ccaatcgggt aaggtgactg  
 480  
 gttgccgtag tccatgcgag gccggc  
 506

<210> 1738  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 1738  
 Met Ala Leu Arg Arg Gln Trp Gln Ala Trp Asn Val Lys Tyr Ala Leu  
 1 5 10 15  
 Ala Val Val Pro Cys Glu Asp Thr Tyr Cys Ser Pro Trp Gly Pro Glu  
 20 25 30  
 Val Val Leu Pro Gly Ala Ser His Asp Thr Lys Arg Thr Gly Pro Thr  
 35 40 45  
 Pro Arg Gly Arg Ala Gly Arg Lys Ser Val Trp Glu Thr Tyr Arg Ser  
 50 55 60  
 Val Leu Lys Thr Leu Glu Gly Leu Ala Gln Gly Asp Arg Asp Leu Arg  
 65 70 75 80  
 Arg Gly Thr Ala Leu Val Glu Val Gln Pro Arg His Pro Val Ala Trp  
 85 90 95  
 Val Gly Gly Asp Val Gly Ala Gly Arg Leu His Val Val Pro Val Gly  
 100 105 110  
 Arg

<210> 1739  
 <211> 420  
 <212> DNA  
 <213> Homo sapiens

<400> 1739  
 cgcgttattg aaaatgctgc tttttttact aaattaggac agcgtttaat cggcgcatta  
 60  
 catcaagtga cgggtgatgg atttggttac cgtggtgata tgcggttacg cccttttggg  
 120  
 gagtctgggc cattgggttag cacgtttaat tcaatagagg actattatca aaccatggt  
 180  
 cgagagtggg agtggttatgc catggttaaa gcccggtgta ttggtggtga ggacgagtat  
 240  
 aaacaagcgt tagaaaggat gttaaggcct ttcgtattta gacgttacat tgatttttagc  
 300  
 gctattgatt ctttgcgaaa aatgaaaacg atgatcagtg ctgaagttcg tcgcaagggg  
 360  
 ttaaaagaca atattaagtt gggaatggga gggatccgtg aaattgaatt tgtggctcaa  
 420

<210> 1740  
 <211> 140  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1740

```

Arg Val Ile Glu Asn Ala Ala Phe Phe Thr Lys Leu Gly Gln Arg Leu
 1             5             10             15
Ile Gly Ala Leu His Gln Val Thr Val Asp Gly Phe Val Tyr Arg Val
      20             25             30
Asp Met Arg Leu Arg Pro Phe Gly Glu Ser Gly Pro Leu Val Ser Thr
      35             40             45
Phe Asn Ser Ile Glu Asp Tyr Tyr Gln Thr His Gly Arg Glu Trp Glu
      50             55             60
Cys Tyr Ala Met Val Lys Ala Arg Val Ile Gly Val Glu Asp Glu Tyr
      65             70             75             80
Lys Gln Ala Leu Glu Arg Met Leu Arg Pro Phe Val Phe Arg Arg Tyr
      85             90             95
Ile Asp Phe Ser Ala Ile Asp Ser Leu Arg Lys Met Lys Thr Met Ile
      100            105            110
Ser Ala Glu Val Arg Arg Lys Gly Leu Lys Asp Asn Ile Lys Leu Gly
      115            120            125
Met Gly Gly Ile Arg Glu Ile Glu Phe Val Ala Gln
      130            135            140

```

&lt;210&gt; 1741

&lt;211&gt; 378

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1741

```

nnacgcgtcg aggtgattca ggccgacgcc actgaccgcg tggtccttca cagtctcaat
60
gggcaggctcg acgtcgctgt ctccaacccg ccctacgtgc cagccggcgc cgtggaggac
120
accgagacgg cccagcacga gcccacggtg gcgctctatg gcggggggccc ggacgggtga
180
gagattccga ttgacgtcct gngtgcgctc agtcgcgctg ctgccaccgg cggagtgcctc
240
gtcatggagc acgaccacga gcagggggcg ctgctgccgg cggccgcttc gtgagccggg
300
ttcaagcagg ccgagaccgg tcaggacctc accggccgcg accgctacct gcgcgcggtg
360
cgtaaaccct gctggtag
378

```

&lt;210&gt; 1742

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1742

```

Xaa Arg Val Glu Val Ile Gln Ala Asp Ala Thr Asp Pro Leu Val Leu
 1             5             10             15
His Ser Leu Asn Gly Gln Val Asp Val Val Val Ser Asn Pro Pro Tyr
      20             25             30
Val Pro Ala Gly Ala Val Glu Asp Thr Glu Thr Ala Gln His Glu Pro

```

35 40  
Thr Val Ala Leu Tyr Gly Gly Gly Pro Asp Gly  
50 55

```
<210> 1743
<211> 4121
<212> DNA
<213> Homo sapiens
```

<400> 1743					
atcacgtaca	actgcaagga	ggaggtccag	atccatgatg	agctgctcaa	ggctcattac
60					
acggttgggc	ggctctcgga	caacacccct	gagcactacc	tgggtgcaagg	ccgctacttc
120					
ctgggtcggg	atgtcactga	gaagatggat	gtgctgggca	ccgtgggaag	ctgtggggcc
180					
cccaacttcc	ggcaggtgca	gggtgggctc	actgtgttcg	gcatgggaca	gccagcctc
240					
tcagggttca	ggcgggtcct	ccagaaactc	cagaaggacg	gacataggga	gtgtgtcatc
300					
ttctgtgtgc	gggaggaacc	tgtgcttttc	ctgcgtgcag	atgaggactt	tgtgtcctac
360					
acacctcgag	acaagcagaa	ccttcatgag	aacctccagg	gccttggaac	cggggctcgg
420					
gtggagagcc	tggagctggc	catccggaaa	gagatccacg	actttgcccc	gctgagcgag
480					
aacacatacc	atgtgtacca	taacaccgag	gacctgtggg	gggagcccca	tgtgtggccc
540					
atccatggtg	aggacgactt	gcatgtgacg	gaggaggtgt	acaagcgggc	cctcttcctg
600					
cagcccacct	acaggtacca	ccgcctgccc	ctgcccagac	aagggagtc	cctggaggcc
660					
cagttggacg	cctttgtcag	tgttctccgg	gagaccccca	gcctgctgca	gtcccgtagt
720					
gcccacgggc	ctccccagc	cctcgtcttc	agctgccaga	tgggcgtggg	caggaccaac
780					
ctgggcatgg	tcctgggcac	cctcatcctg	cttcaccgca	gtgggaccac	ctcccagcca
840					
gaggctgccc	ccacgcaggc	caagcccctg	cctatggagc	agttccagg	gatccagagc
900					
tttctccgca	tgggtgcccc	gggaaggagg	atggtggaag	aggtggacag	agccatcact
960					
gcctgtgccg	agttgcatga	cctgaaagaa	gtggtcttgg	aaaaccagaa	gaagttagaa
1020					
gggtatccgac	cggagagccc	agcccaggga	agcggcagcc	gacacagcgt	ctggcagagg
1080					
gcgctgtgga	gcctggagcg	atacttctac	ctgatcctgt	ttaactacta	ccttcatgag
1140					
cagtaccgcg	tggcctttgc	cctcagtttc	agccgctggc	tgtgtgcccc	ccctgagctg
1200					
taccgcctgc	ccgtgacgct	gagctcagca	ggccctgtgg	ctccgaggga	cctcatcgcc
1260					
aggggctccc	tacgggagga	cgatctggtc	tccccggacg	cgctcagcac	tgtcagagag
1320					

atggatgtgg ccaacttccg gcgggtgccc cgcattgccc tctacggcac ggcccagccc  
1380  
agcgccaagg ccctggggag catcctggcc tacctgacgg acgccaagag gaggtgctcg  
1440  
aaggttgtct ggggtgagcct tcgggaggag gccgtgttgg agtgtgacgg gcacacctac  
1500  
agcctgcggg ggctggggcc ccctgtggct cctgaccagc tggagaccct ggaggcccag  
1560  
ctgaaggccc atctaagcga gcctccccc ggcaaggagg gcccctgac ctacaggttc  
1620  
cagacctgcc ttacctgca ggaggtcttc agccagcacc gcagggcctg tcctggcctc  
1680  
acctaccacc gcatcccat gccggacttc tgtgcccccc gagaggagga ctttgaccag  
1740  
ctgctggagg ccctgcgggc gcgctctcc aaggaccag gactggctt cgtgttcagc  
1800  
tgccctcagc gccagggcgc taccacaact gcgatgggtg tggctgtcct ggcttctgg  
1860  
cacatccaag gcttccccga ggtgggtgag gaggagctcg tgagtgtgcc tgatgccaag  
1920  
ttcactaagg gtgaatttca ggtagttaag aaggtggtgc agctgtctac cgatgggac  
1980  
cgtgtgaaga aggaggtgga cgcagcgtg gacactgtca gcgagaccat gacgcccag  
2040  
cactaccacc tgcgggagat catcatctgc acctaccgcc aggcgaaggc agcgaaagag  
2100  
gcgcaggaaa tgcgaggcct gcagctgcgg agcctgcagt acttgagcgc ctatgtctgc  
2160  
ctgattctct tcaacgcgt cctccacctg gagaaggccg actcctggca gaggccttc  
2220  
agcacctgga tgaggagggt ggcacgaag gctggcatct acgagatcct taacgagctg  
2280  
ggcttccccg agctggagag cggggaggac cagcccttct ccaggctgcg ctaccgggtg  
2340  
caggagcaga gctgcagcct cgagccctct gccccgagg acttgctgta gggggcctta  
2400  
ctcctgtcc cccaccacc agggccccc gcaggcctgg ggtgtctgag gtgctcttgg  
2460  
ctgggagcgg ccctgagggg tgctggcctt gaaatgatcc cccacttcc tggagagact  
2520  
gagcggagtt gggagccttt ttagaaagaa ctttttatag gacagggaga cagcacagcc  
2580  
atcccttgca aaccaccaag gtgtgtggct gacctccagg gaggagcact cactggagtg  
2640  
ctcacaagg gcacactgct gtgtgtacct tgcagacagg ccggcggtca gcctccaagg  
2700  
ggctcactcc ccagttgcc aaacactgtg gatctctctg tcctcttctc cctctctca  
2760  
gattggcctg gcagcccctg gcacagagca gacctgcca ctggtagctc cccacttctc  
2820  
tactctgct gctctgccat tgccgtccc cttcttctg cccaagcact gcctcgggc  
2880  
gtctggcagc ctgaggtggg tggaggggac agtgttcttg atagatctat tatgtgaaag  
2940

gcagcttcac ccagttttct ggactctcat gcccccatct ccgacctggg agacttcagg  
 3000  
 aatgacaacc taccagcct ggtggggctg gcaggatggt ggaggtttct caaggagctg  
 3060  
 gagacttcag ggagccctc tcatggggag gaaagagctt ccagggggcg aacgcagcac  
 3120  
 agagggaagag gcctgctcca cttgtctggg aacctgggca ggaggcacag aggaagccaa  
 3180  
 ggcctggagc tgcaggctcc ccggcatctc tctctgtccc ggagcccag gatggcctgg  
 3240  
 tgccccacc tgctgcagca ggagcccaa ggagtgctag ctgagggtgg ttgctgggg  
 3300  
 ggctcctcatg gacagtggg tgtgcaagg tgcactgagg gtggtgggag gggatcacct  
 3360  
 gggttccagg ccattcctgc tgagcatctt tgagcctgcc ttccgggtgg agcagaaaag  
 3420  
 gccagacct gctgagttag aggtgctgg gatccactgt ttccacacag cgggaaggct  
 3480  
 gctgggaaca ggtggcagag aagtgccatg tttgcgttga gccttcagc tcttccagct  
 3540  
 ggggactggg gcttgctgaa acccaggagc tgaacagtga ggaggctgc caccttgctt  
 3600  
 ggctcactgg gaccaggaaa gcctgtcttt ggtaggctc gtgtacttct gcaggaaaaa  
 3660  
 aaaaaaagga tgtgtcattg gtcatgatat ttgaaaagg gaggaggccg aagttgttcc  
 3720  
 catttatcca gtattgaaa atatttgacc cccttggtg aattcttttg cagaactact  
 3780  
 gtgtgtctgt tcaactacct ttcagggtta ttgtttttat ttttgcagta attagacgt  
 3840  
 tttaatttct ttgcagacaa ggtctagatg cggagtcaga gatgggactg aatggggagg  
 3900  
 gatcctttgt gttctcatgg ttggctctga ctttcagctg tgttgggacc actggctgat  
 3960  
 cacatcacct ctctgcctca gtttcccat ctgtaaaatg ggagaataat acttgacct  
 4020  
 ctacctaca ggggtgtgtg gaggattcat ttgtgatttt ttttttttt tttgtacaga  
 4080  
 gcttttaagc attaaaaaca gctaaatgtg aaaaaaaaaa a  
 4121

<210> 1744

<211> 796

<212> PRT

<213> Homo sapiens

<400> 1744

Ile	Thr	Tyr	Asn	Cys	Lys	Glu	Glu	Phe	Gln	Ile	His	Asp	Glu	Leu	Leu
1				5				10					15		
Lys	Ala	His	Tyr	Thr	Leu	Gly	Arg	Leu	Ser	Asp	Asn	Thr	Pro	Glu	His
		20						25					30		
Tyr	Leu	Val	Gln	Gly	Arg	Tyr	Phe	Leu	Val	Arg	Asp	Val	Thr	Glu	Lys
		35					40					45			
Met	Asp	Val	Leu	Gly	Thr	Val	Gly	Ser	Cys	Gly	Ala	Pro	Asn	Phe	Arg



50		55		60	
Gln Val Gln Gly Gly Leu Thr Val Phe Gly Met Gly Gln Pro Ser Leu					
65		70		75	80
Ser Gly Phe Arg Arg Val Leu Gln Lys Leu Gln Lys Asp Gly His Arg					
	85		90		95
Glu Cys Val Ile Phe Cys Val Arg Glu Glu Pro Val Leu Phe Leu Arg					
	100		105		110
Ala Asp Glu Asp Phe Val Ser Tyr Thr Pro Arg Asp Lys Gln Asn Leu					
	115		120		125
His Glu Asn Leu Gln Gly Leu Gly Pro Gly Val Arg Val Glu Ser Leu					
	130		135		140
Glu Leu Ala Ile Arg Lys Glu Ile His Asp Phe Ala Gln Leu Ser Glu					
145		150		155	160
Asn Thr Tyr His Val Tyr His Asn Thr Glu Asp Leu Trp Gly Glu Pro					
	165		170		175
His Ala Val Ala Ile His Gly Glu Asp Asp Leu His Val Thr Glu Glu					
	180		185		190
Val Tyr Lys Arg Pro Leu Phe Leu Gln Pro Thr Tyr Arg Tyr His Arg					
	195		200		205
Leu Pro Leu Pro Glu Gln Gly Ser Pro Leu Glu Ala Gln Leu Asp Ala					
	210		215		220
Phe Val Ser Val Leu Arg Glu Thr Pro Ser Leu Leu Gln Leu Arg Asp					
225		230		235	240
Ala His Gly Pro Pro Ala Leu Val Phe Ser Cys Gln Met Gly Val					
	245		250		255
Gly Arg Thr Asn Leu Gly Met Val Leu Gly Thr Leu Ile Leu Leu His					
	260		265		270
Arg Ser Gly Thr Thr Ser Gln Pro Glu Ala Ala Pro Thr Gln Ala Lys					
	275		280		285
Pro Leu Pro Met Glu Gln Phe Gln Val Ile Gln Ser Phe Leu Arg Met					
	290		295		300
Val Pro Gln Gly Arg Arg Met Val Glu Glu Val Asp Arg Ala Ile Thr					
305		310		315	320
Ala Cys Ala Glu Leu His Asp Leu Lys Glu Val Val Leu Glu Asn Gln					
	325		330		335
Lys Lys Leu Glu Gly Ile Arg Pro Glu Ser Pro Ala Gln Gly Ser Gly					
	340		345		350
Ser Arg His Ser Val Trp Gln Arg Ala Leu Trp Ser Leu Glu Arg Tyr					
	355		360		365
Phe Tyr Leu Ile Leu Phe Asn Tyr Tyr Leu His Glu Gln Tyr Pro Leu					
	370		375		380
Ala Phe Ala Leu Ser Phe Ser Arg Trp Leu Cys Ala His Pro Glu Leu					
385		390		395	400
Tyr Arg Leu Pro Val Thr Leu Ser Ser Ala Gly Pro Val Ala Pro Arg					
	405		410		415
Asp Leu Ile Ala Arg Gly Ser Leu Arg Glu Asp Asp Leu Val Ser Pro					
	420		425		430
Asp Ala Leu Ser Thr Val Arg Glu Met Asp Val Ala Asn Phe Arg Arg					
	435		440		445
Val Pro Arg Met Pro Ile Tyr Gly Thr Ala Gln Pro Ser Ala Lys Ala					
	450		455		460
Leu Gly Ser Ile Leu Ala Tyr Leu Thr Asp Ala Lys Arg Arg Leu Arg					
465		470		475	480
Lys Val Val Trp Val Ser Leu Arg Glu Glu Ala Val Leu Glu Cys Asp					

485 490 495  
 Gly His Thr Tyr Ser Leu Arg Trp Pro Gly Pro Pro Val Ala Pro Asp  
 500 505 510  
 Gln Leu Glu Thr Leu Glu Ala Gln Leu Lys Ala His Leu Ser Glu Pro  
 515 520 525  
 Pro Pro Gly Lys Glu Gly Pro Leu Thr Tyr Arg Phe Gln Thr Cys Leu  
 530 535 540  
 Thr Met Gln Glu Val Phe Ser Gln His Arg Arg Ala Cys Pro Gly Leu  
 545 550 555 560  
 Thr Tyr His Arg Ile Pro Met Pro Asp Phe Cys Ala Pro Arg Glu Glu  
 565 570 575  
 Asp Phe Asp Gln Leu Leu Glu Ala Leu Arg Ala Ala Leu Ser Lys Asp  
 580 585 590  
 Pro Gly Thr Gly Phe Val Phe Ser Cys Leu Ser Gly Gln Gly Arg Thr  
 595 600 605  
 Thr Thr Ala Met Val Val Ala Val Leu Ala Phe Trp His Ile Gln Gly  
 610 615 620  
 Phe Pro Glu Val Gly Glu Glu Leu Val Ser Val Pro Asp Ala Lys  
 625 630 635 640  
 Phe Thr Lys Gly Glu Phe Gln Val Val Met Lys Val Val Gln Leu Leu  
 645 650 655  
 Pro Asp Gly His Arg Val Lys Lys Glu Val Asp Ala Ala Leu Asp Thr  
 660 665 670  
 Val Ser Glu Thr Met Thr Pro Met His Tyr His Leu Arg Glu Ile Ile  
 675 680 685  
 Ile Cys Thr Tyr Arg Gln Ala Lys Ala Ala Lys Glu Ala Gln Glu Met  
 690 695 700  
 Arg Arg Leu Gln Leu Arg Ser Leu Gln Tyr Leu Glu Arg Tyr Val Cys  
 705 710 715 720  
 Leu Ile Leu Phe Asn Ala Tyr Leu His Leu Glu Lys Ala Asp Ser Trp  
 725 730 735  
 Gln Arg Pro Phe Ser Thr Trp Met Gln Glu Val Ala Ser Lys Ala Gly  
 740 745 750  
 Ile Tyr Glu Ile Leu Asn Glu Leu Gly Phe Pro Glu Leu Glu Ser Gly  
 755 760 765  
 Glu Asp Gln Pro Phe Ser Arg Leu Arg Tyr Arg Trp Gln Glu Gln Ser  
 770 775 780  
 Cys Ser Leu Glu Pro Ser Ala Pro Glu Asp Leu Leu  
 785 790 795

&lt;210&gt; 1745

&lt;211&gt; 426

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1745

ntcattgaaaa ttaaaaaatg gcttggtgta gcagcccttg ctacagtcgc aggtttggct  
 60  
 cttgcagctt gcggaaactc agaaaagaaa gcagacaatg caacaactat caaaatcgca  
 120  
 actgttaacc gtagcgggtc tgaagaaaaa cgttgggaca aaatccaaga attgggttaa  
 180  
 aaagacggta tcaactttgga atttacggag ttcacaggct actcacaacc aaacaaggca  
 240

actgctgatg gcgaagtaga tttgaacgct ttccaacact ataacttctt gaacaactgg  
 300  
 aacaaagaaa acgggaaaga ccttgtagcg attgcagata cttacatctc tccaatccgt  
 360  
 ctttactcag gtttgaatgg aagtgacaac aagtacacta aagtagaggc tggagtgtgc  
 420  
 tcgcga  
 426

<210> 1746

<211> 142

<212> PRT

<213> Homo sapiens

<400> 1746

Xaa	Met	Lys	Ile	Lys	Lys	Trp	Leu	Gly	Val	Ala	Ala	Leu	Ala	Thr	Val
1				5					10					15	
Ala	Gly	Leu	Ala	Leu	Ala	Ala	Cys	Gly	Asn	Ser	Glu	Lys	Lys	Ala	Asp
		20						25					30		
Asn	Ala	Thr	Thr	Ile	Lys	Ile	Ala	Thr	Val	Asn	Arg	Ser	Gly	Ser	Glu
		35				40						45			
Glu	Lys	Arg	Trp	Asp	Lys	Ile	Gln	Glu	Leu	Val	Lys	Lys	Asp	Gly	Ile
	50				55					60					
Thr	Leu	Glu	Phe	Thr	Glu	Phe	Thr	Gly	Tyr	Ser	Gln	Pro	Asn	Lys	Ala
65				70					75					80	
Thr	Ala	Asp	Gly	Glu	Val	Asp	Leu	Asn	Ala	Phe	Gln	His	Tyr	Asn	Phe
			85					90						95	
Leu	Asn	Asn	Trp	Asn	Lys	Glu	Asn	Gly	Lys	Asp	Leu	Val	Ala	Ile	Ala
		100					105					110			
Asp	Thr	Tyr	Ile	Ser	Pro	Ile	Arg	Leu	Tyr	Ser	Gly	Leu	Asn	Gly	Ser
	115					120					125				
Asp	Asn	Lys	Tyr	Thr	Lys	Val	Glu	Ala	Gly	Val	Cys	Ser	Arg		
	130					135					140				

<210> 1747

<211> 373

<212> DNA

<213> Homo sapiens

<400> 1747

nnaagctttt gtccacacag ataggaagta atcatggtca ctcaccgccc agaactgcat  
 60  
 atcaccgccc ctgaaggcgt gttggaggca ccggcggggt cgctcctcaa ggacggcacg  
 120  
 tggcacatca tgtaccagta cgaaccacac gcggatgggc acggcctctg gggacatgtc  
 180  
 acttccccca acttctctcc ctttaactgg acagacggag aagacattct ggttcagag  
 240  
 ggcgaggaaa ccgacctgtg ggcaggttct gttattagca acgctggaaa agtgacgctg  
 300  
 ttttttacct ccgtcaaggg cgacnaagac ggaaatccat cgggcagatg tcgccgacgg  
 360  
 caaagctacg cgt  
 373

<210> 1748  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 1748  
 Met Val Thr His Arg Pro Glu Leu His Ile Thr Ala Pro Glu Gly Val  
 1 5 10 15  
 Leu Glu Ala Pro Ala Gly Ser Leu Leu Lys Asp Gly Thr Trp His Ile  
 20 25 30  
 Met Tyr Gln Tyr Glu Pro His Ala Asp Gly His Gly Leu Trp Gly His  
 35 40 45  
 Val Thr Ser Pro Asn Phe Ser Pro Phe Asn Trp Thr Asp Gly Glu Asp  
 50 55 60  
 Ile Leu Val Pro Glu Gly Glu Glu Thr Asp Leu Trp Ala Gly Ser Val  
 65 70 75 80  
 Ile Ser Asn Ala Gly Lys Val Thr Leu Phe Phe Thr Ser Val Lys Gly  
 85 90 95  
 Asp Xaa Asp Gly Asn Pro Ser Gly Arg Cys Arg Arg Arg Gln Ser Tyr  
 100 105 110  
 Ala

<210> 1749  
 <211> 853  
 <212> DNA  
 <213> Homo sapiens

<400> 1749  
 cccagcaggc aaagagagag gcctccctgg ctctcagagtgt caggggagcc gcgttccttc  
 60  
 ccagggctgg agcagaggac cacaaggcag cagaaagcgc ggggccagat gagggccagg  
 120  
 aaggggagga gagtgagggc caagaacgag ccttaaggga gcagtcccaa gctggagcca  
 180  
 cccagggctg ggtctgggag tcttcagtggt ccacttggtcc caggttaggg ggcttgctt  
 240  
 gctctctcca gggccagtct ctgtgtgtgg ggactcagcc cgtggccggc agatgccatc  
 300  
 caggatgtac aaggtgcagc caaggcaggc catgcagggg ccgggcctgt ctgcagctgg  
 360  
 tggatgcctg tgggcatggc tttctctggg gaccccatc ctgtcagtag caaccctggc  
 420  
 agtgtccgga gcggctctag acaactttgg tcataggaac tctggagggtg ggttctggtc  
 480  
 atctgaggtg gctactcaac aggtttgagg cccacagca acagaagtcc aggaccact  
 540  
 aggttgctc agaagcccta agactgatga gctggagcgc gcatttgaga gaagcctcgc  
 600  
 acccactgtg tactggcccc gctcaggccg gcctggcaca ccgttgctg ctggcggtc  
 660  
 tcattgggaa gcgcctgggc actggggatt gcttgtgggc cactcaactc ttggggcagt  
 720

ggccgtaacc ctagtgtgcc tgaggccctt atgtcccctt atgttcctgg tactggagct  
 780  
 tgagctcttg cctggcacgc tgcagctgca cccaccctgc ttgatccac ctgggaggcc  
 840  
 aggacactga gga  
 853

<210> 1750  
 <211> 64  
 <212> PRT  
 <213> Homo sapiens

<400> 1750  
 Glu Lys Pro Arg Thr His Cys Val Leu Ala Pro Leu Arg Pro Ala Trp  
 1 5 10 15  
 His Thr Val Ala Cys Trp Arg Leu Ser Trp Gly Ser Ala Trp Ala Leu  
 20 25 30  
 Gly Ile Ala Cys Gly Pro Leu Asn Ser Trp Gly Ser Gly Arg Asn Pro  
 35 40 45  
 Ser Leu Pro Glu Ala Leu Met Ser Pro Tyr Val Pro Gly Thr Gly Ala  
 50 55 60

<210> 1751  
 <211> 531  
 <212> DNA  
 <213> Homo sapiens

<400> 1751  
 ggccgcaccc cgcactctggg ccgatggcga atgggcaatt tcagtcgcag acagggacat  
 60  
 gacgatgccg ttgtcgagaa ggccatggcg acgaccgggg tctccgagct tactgatagg  
 120  
 gcatggtctt cctgtcagg aggagagagg caacgggtac agctggctcg tgccttggca  
 180  
 caggagcccg agatcttatt tcttgacgag ccgacaaatc accttgactt gccacaccag  
 240  
 atcgacctcc tggagcgggt ccgaggactc ggcctgacga cggtcaccgt cattcatgac  
 300  
 ctcgacttgg ctgccgccta cgcgcacgac ctcactgtgc tcgactcggg tcgcatgggt  
 360  
 gctggcggac cggcgagcac agtgctgacg cctggccttg tccgtgacca ctttgggtgc  
 420  
 gacggtgagg tttggtcctc ctcgaggcgc ggcttcacct ggaacgggct gcagacatga  
 480  
 cgacgcgtat cgcagtatcc ctccgatggg acgacgccat tgacttgagc c  
 531

<210> 1752  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 1752  
 Gly Arg Ile Pro His Leu Gly Arg Trp Arg Met Gly Asn Phe Ser Arg

```

      1           5           10           15
Arg Gln Gly His Asp Asp Ala Val Val Glu Lys Ala Met Ala Thr Thr
      20           25           30
Gly Val Ser Glu Leu Thr Asp Arg Ala Trp Ser Ser Leu Ser Gly Gly
      35           40           45
Glu Arg Gln Arg Val Gln Leu Ala Arg Ala Leu Ala Gln Glu Pro Glu
      50           55           60
Ile Leu Phe Leu Asp Glu Pro Thr Asn His Leu Asp Leu Pro His Gln
65      70           75           80
Ile Asp Leu Leu Glu Arg Val Arg Gly Leu Gly Leu Thr Thr Val Thr
      85           90           95
Val Ile His Asp Leu Asp Leu Ala Ala Tyr Ala Asp Asp Leu Ile
      100          105          110
Val Leu Asp Ser Gly Arg Met Val Ala Gly Gly Pro Ala Ser Thr Val
      115          120          125
Leu Thr Pro Gly Leu Val Arg Asp His Phe Gly Val Asp Gly Glu Val
      130          135          140
Trp Ser Ser Ser Arg Arg Gly Phe Thr Trp Asn Gly Leu Gln Thr
145          150          155

```

&lt;210&gt; 1753

&lt;211&gt; 920

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1753

```

gagacagtgg agaggctggg tcagtccctt gccaggaca ccccggtcct ggggccttgc
60
tgggaccgga tggctctggg gactcagggc cgctctgtgc tggacaggga ttccaaggac
120
acacagacca ggatcagcca aaagggccgc cgtctgcagc ccccggggac tccctcgggc
180
ccacccaga gaagggcccg gaaacagctg aaccctgtcc ggggcaccga gagagtggac
240
cctgggttcg aggggggtgac tctgaagttt cagataaagc cggactccag cctgcagatc
300
atccccacgt acagcctgcc ctgcagtagc cgttctcagg aatccccctgc agatgctgtt
360
gggggcntg cagccatccc agagggcacc gagggccact cagcaggcag cgaggccctg
420
gagccccggc gctgtgcttc ctgtcggacc cagaggaccc cgctctggag agacgctgaa
480
gatgggaccc ttctctgcaa cgctgtggg atcagggtaca agaaatacgg cactcgtgc
540
tccagctgct ggtgggtgcc caggaaaaat gtccagccca agaggctatg tggcagatgt
600
ggagtgtccc tggaccccat tcaggaaggt taaaccacgc ttcaccctgc tgagctgctg
660
cttctgcctc cgtttcacca gtgggagaat gggcagaagc agctctccta ggaggattgg
720
ggaaaagacc ggctgtcctc ctctctgcca tctccagatt caaggatccc gggggaagac
780
ccaggcctca ggtggcagag cctgctaggg gtcaccagcc ccttctccag tcagccttgg
840

```

ccgaggcccc ctcaggagac gctctcagga aggatgagca ttgttacagc agggacaata  
 900  
 aagtacagag atatgccgag  
 920

<210> 1754  
 <211> 210  
 <212> PRT  
 <213> Homo sapiens

<400> 1754  
 Glu Thr Val Glu Arg Leu Gly Gln Ser Pro Ala Gln Asp Thr Pro Val  
 1 5 10 15  
 Leu Gly Pro Cys Trp Asp Pro Met Ala Leu Gly Thr Gln Gly Arg Leu  
 20 25 30  
 Leu Leu Asp Arg Asp Ser Lys Asp Thr Gln Thr Arg Ile Ser Gln Lys  
 35 40 45  
 Gly Arg Arg Leu Gln Pro Pro Gly Thr Pro Ser Ala Pro Pro Gln Arg  
 50 55 60  
 Arg Pro Arg Lys Gln Leu Asn Pro Cys Arg Gly Thr Glu Arg Val Asp  
 65 70 75 80  
 Pro Gly Phe Glu Gly Val Thr Leu Lys Phe Gln Ile Lys Pro Asp Ser  
 85 90 95  
 Ser Leu Gln Ile Ile Pro Thr Tyr Ser Leu Pro Cys Ser Ser Arg Ser  
 100 105 110  
 Gln Glu Ser Pro Ala Asp Ala Val Gly Gly Xaa Ala Ala Ile Pro Glu  
 115 120 125  
 Gly Thr Glu Gly His Ser Ala Gly Ser Glu Ala Leu Glu Pro Arg Arg  
 130 135 140  
 Cys Ala Ser Cys Arg Thr Gln Arg Thr Pro Leu Trp Arg Asp Ala Glu  
 145 150 155 160  
 Asp Gly Thr Leu Leu Cys Asn Ala Cys Gly Ile Arg Tyr Lys Lys Tyr  
 165 170 175  
 Gly Thr Arg Cys Ser Ser Cys Trp Leu Val Pro Arg Lys Asn Val Gln  
 180 185 190  
 Pro Lys Arg Leu Cys Gly Arg Cys Gly Val Ser Leu Asp Pro Ile Gln  
 195 200 205  
 Glu Gly  
 210

<210> 1755  
 <211> 437  
 <212> DNA  
 <213> Homo sapiens

<400> 1755  
 nnttctgcag agtagggaga cagtcttggg cctggatggc cattagtgtc tggagtcacg  
 60  
 ggagcaatca gaaatgatca aggagaatcc ttgatacgaa ctgcattcca gtgtcttcag  
 120  
 ttggttgta cagattttct accaacaatg ccttgtactt gcctgcaa atgttgtagat  
 180  
 gttgcaggta gctttggcct ccataaccaa gaactcaata ttagtttaac ttcaataggt  
 240

ttattgtgga atatttcaga ttattttttc caaagagggg aaactattga aaaagaacta  
 300  
 aataaggaag aggcagcaca gcaaaagcag gcagaagaga aaggagttgt tttaaatcgg  
 360  
 ccattccacc ctgcaccgcc atttgattgc ttgtggttat gtctttatgc aaaattgggt  
 420  
 gaactatgtg tggatcc  
 437

<210> 1756

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1756

Met	Gly	Ala	Ile	Arg	Asn	Asp	Gln	Gly	Glu	Ser	Leu	Ile	Arg	Thr	Ala
1				5				10					15		
Phe	Gln	Cys	Leu	Gln	Leu	Val	Val	Thr	Asp	Phe	Leu	Pro	Thr	Met	Pro
			20					25					30		
Cys	Thr	Cys	Leu	Gln	Ile	Val	Val	Asp	Val	Ala	Gly	Ser	Phe	Gly	Leu
		35					40					45			
His	Asn	Gln	Glu	Leu	Asn	Ile	Ser	Leu	Thr	Ser	Ile	Gly	Leu	Leu	Trp
	50				55					60					
Asn	Ile	Ser	Asp	Tyr	Phe	Phe	Gln	Arg	Gly	Glu	Thr	Ile	Glu	Lys	Glu
65					70					75				80	
Leu	Asn	Lys	Glu	Glu	Ala	Ala	Gln	Gln	Lys	Gln	Ala	Glu	Glu	Lys	Gly
			85					90					95		
Val	Val	Leu	Asn	Arg	Pro	Phe	His	Pro	Ala	Pro	Pro	Phe	Asp	Cys	Leu
			100					105					110		
Trp	Leu	Cys	Leu	Tyr	Ala	Lys	Leu	Gly	Glu	Leu	Cys	Val	Asp		
			115				120					125			

<210> 1757

<211> 1297

<212> DNA

<213> Homo sapiens

<400> 1757

nggatccgac ggaaatagaa ttgaaggcat tctaaaatgg ctaaccgtac agtgaaggat  
 60  
 gcgcacagca tccatggcac caaccctcaa tatctggtgg agaagatcat tcgaacgcga  
 120  
 atctatgagt ccaagtactg gaaagaggag tgctttggac ttacagctga acttgtagtc  
 180  
 gataaagcca tggagttaag gtttgtgggt ggcgctctatg gtggcaacat aaaaccaaca  
 240  
 ccctttctgt gtttaacctt gaagatgctt caaattcaac ccgagaagga tatcattgta  
 300  
 gagtttatca aaaatgaaga tttcaagtat gtccgcatgc tgggggcact ttacatgagg  
 360  
 ctgacaggca ctgcaattga ttgctacaag tacttgaac ctttgtacaa tgactatcga  
 420  
 aaaatcaaga gccagaaccg aaatggggag tttgaattga tgcattgtga tgagtttatt  
 480



gatgaactat tgcacagtga gagagtctgt gatatcattc tgccccgact acagaaacgc  
 540  
 tatgtattag aggaagctga gcaactggag cctcgagtta gtgctctgga agaggacatg  
 600  
 gatgatgtgg agtccagtga agaggaagaa gaggaggatg agaagttgga aagagtgccg  
 660  
 tcacctgata accgccggag aagctaccga gacttggaca agccccgtcg ctctcccaca  
 720  
 ctgcgctaca ggaggagtag gagccggtct cccagaaggc ggagtcgata tcccaaaagg  
 780  
 agaagccccct cccctcgccg agaaaggcat cggagcaaga gtccaagacg tcaccgcagc  
 840  
 aggtccccgag atcgccggca cagatcccgt tccaagtccc caggtcata ccgtagtcac  
 900  
 agacacagga gccactcaaa gtctcccgaa aggtctaaga agagccacaa gaagagccgg  
 960  
 agaggggaatg agtaatggac tcagtttggg tttagtccac atggcctcct gtggatataa  
 1020  
 ggatatctgt atgtggaagg attaatgctt cccccaggca gctataagaa tatttttagt  
 1080  
 tttttcttat caagtttctc aacctttatt tttaatgaag gaggtgctga gttttgtatc  
 1140  
 tttttaatca taatcaacat cagtttttga cccaactaac cttgactgta ttcaactta  
 1200  
 tgagagtata aaggatctgg aggttgggga tatgactgac aaggaaaggc tgtggccacc  
 1260  
 tgatgaccct ttcccttttt attaaaccgg acacacc  
 1297

&lt;210&gt; 1758

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1758

Met	Ala	Asn	Arg	Thr	Val	Lys	Asp	Ala	His	Ser	Ile	His	Gly	Thr	Asn
1				5					10					15	
Pro	Gln	Tyr	Leu	Val	Glu	Lys	Ile	Ile	Arg	Thr	Arg	Ile	Tyr	Glu	Ser
			20					25					30		
Lys	Tyr	Trp	Lys	Glu	Glu	Cys	Phe	Gly	Leu	Thr	Ala	Glu	Leu	Val	Val
		35				40					45				
Asp	Lys	Ala	Met	Glu	Leu	Arg	Phe	Val	Gly	Gly	Val	Tyr	Gly	Gly	Asn
	50					55					60				
Ile	Lys	Pro	Thr	Pro	Phe	Leu	Cys	Leu	Thr	Leu	Lys	Met	Leu	Gln	Ile
	65				70					75				80	
Gln	Pro	Glu	Lys	Asp	Ile	Ile	Val	Glu	Phe	Ile	Lys	Asn	Glu	Asp	Phe
			85					90					95		
Lys	Tyr	Val	Arg	Met	Leu	Gly	Ala	Leu	Tyr	Met	Arg	Leu	Thr	Gly	Thr
		100						105					110		
Ala	Ile	Asp	Cys	Tyr	Lys	Tyr	Leu	Glu	Pro	Leu	Tyr	Asn	Asp	Tyr	Arg
	115						120					125			
Lys	Ile	Lys	Ser	Gln	Asn	Arg	Asn	Gly	Glu	Phe	Glu	Leu	Met	His	Val
	130				135						140				
Asp	Glu	Phe	Ile	Asp	Glu	Leu	Leu	His	Ser	Glu	Arg	Val	Cys	Asp	Ile

145                      150                      155                      160  
 Ile Leu Pro Arg Leu Gln Lys Arg Tyr Val Leu Glu Glu Ala Glu Gln  
                                  165                      170                      175  
 Leu Glu Pro Arg Val Ser Ala Leu Glu Glu Asp Met Asp Asp Val Glu  
                                  180                      185                      190  
 Ser Ser Glu Glu Glu Glu Glu Asp Glu Lys Leu Glu Arg Val Pro  
                                  195                      200                      205  
 Ser Pro Asp His Arg Arg Arg Ser Tyr Arg Asp Leu Asp Lys Pro Arg  
                                  210                      215                      220  
 Arg Ser Pro Thr Leu Arg Tyr Arg Arg Ser Arg Ser Arg Ser Pro Arg  
 225                                   230                      235                      240  
 Arg Arg Ser Arg Ser Pro Lys Arg Arg Ser Pro Ser Pro Arg Arg Glu  
                                  245                      250                      255  
 Arg His Arg Ser Lys Ser Pro Arg Arg His Arg Ser Arg Ser Arg Asp  
                                  260                      265                      270  
 Arg Arg His Arg Ser Arg Ser Lys Ser Pro Gly His His Arg Ser His  
                                  275                      280                      285  
 Arg His Arg Ser His Ser Lys Ser Pro Glu Arg Ser Lys Lys Ser His  
                                  290                      295                      300  
 Lys Lys Ser Arg Arg Gly Asn Glu  
 305                                   310

&lt;210&gt; 1759

&lt;211&gt; 324

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1759

aattccatag tcctcatggg caagagttac acagcgtgga ggaccaactc ccaggcactc  
 60  
 ggccctgggca gacacaatta ttgtcgggaat ccagatggtg atgccagacc ttggtgcat  
 120  
 gtgatgaagg accgaaagct gacgtgggaa tactgtgaca tgtcccatg ctccacctgt  
 180  
 ggccctgaggc agtgcaaacg gcctcagttt agaactaaag gaggactcta cacagacatc  
 240  
 acctcacacc cttggcaggc tgccatcttt gtcagcaaca agaggctctcc tggagagaga  
 300  
 ttcctttgtg gaggggtgct gatc  
 324

&lt;210&gt; 1760

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1760

Asn Ser Ile Val Leu Met Gly Lys Ser Tyr Thr Ala Trp Arg Thr Asn  
 1                      5                      10                      15  
 Ser Gln Ala Leu Gly Leu Gly Arg His Asn Tyr Cys Arg Asn Pro Asp  
                                  20                      25                      30  
 Gly Asp Ala Arg Pro Trp Cys His Val Met Lys Asp Arg Lys Leu Thr  
                                  35                      40                      45  
 Trp Glu Tyr Cys Asp Met Ser Pro Cys Ser Thr Cys Gly Leu Arg Gln

```

      50              55              60
Cys Lys Arg Pro Gln Phe Arg Thr Lys Gly Gly Leu Tyr Thr Asp Ile
65              70              75              80
Thr Ser His Pro Trp Gln Ala Ala Ile Phe Val Ser Asn Lys Arg Ser
      85              90              95
Pro Gly Glu Arg Phe Leu Cys Gly Gly Val Leu Ile
      100              105

```

&lt;210&gt; 1761

&lt;211&gt; 351

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1761

```

ngcgatctcg gctcactaca acctcgggtga cagagcgaga ctctatccca aaaaaataaa
60
aataaaaaatc aactggagaa ggaaatgggg ttggggagca tcctctgaat atataaaggc
120
agccattcat tgtaggagag gaggtagaag gaaatgctgt ttgtcgatgg ttcttttcca
180
gagaggaaga gaggagaaag gaagagcggg gagcaggtgg ggagcccgc gtaagacccc
240
acagtggggc caggtggtct tgcacctgt attcccactt tggtggggc agcccagagt
300
ccaggccagc aggtaatgcc ccagccatgc cactcggtc ctattggatc c
351

```

&lt;210&gt; 1762

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1762

```

Met Ala Gly Ala Leu Pro Ala Gly Leu Asp Ser Gly Leu Pro Gln Pro
 1              5              10              15
Lys Trp Glu Tyr Arg Val Gln Asp His Leu Ala Pro Leu Trp Gly Leu
      20              25              30
Thr Ala Gly Ser Pro Pro Ala Pro Arg Ser Ser Phe Leu Leu Ser Ser
      35              40              45
Ser Leu Glu Lys Asn His Arg Gln Thr Ala Phe Pro Ser Thr Ser Ser
      50              55              60
Pro Thr Met Asn Gly Cys Leu Tyr Ile Phe Arg Gly Cys Ser Pro Thr
65              70              75              80
Pro Phe Pro Ser Pro Val Asp Phe Tyr Phe Tyr Phe Phe Gly Ile Glu
      85              90              95
Ser Arg Ser Val Thr Glu Val Val Val Ser Arg Asp Arg
      100              105

```

&lt;210&gt; 1763

&lt;211&gt; 356

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1763

gcgcgccggg ggcgcgatgt ggagcgggca cttaccctgt tcatggccaa gacaggcgag  
 60  
 actcagatgc ttttcaaaga tgacgtcagc acatttccat tgattgctgc cagacctttc  
 120  
 accatcccct acctgacagc tcttcttccg tctgaactgg agatgcaaca aatggaagag  
 180  
 acagattcct cggagcagga tgaacagaca gacacagaga accttgctct tcatatcagc  
 240  
 atggaggatt ctggagccga gaaagagaac acctctgtcc tgcagcagaa cccctccttg  
 300  
 tcgggttagcc ggaatgggga ggagaacatc atcgataacc cttatctgcg accggt  
 356

<210> 1764

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1764

Ala	Arg	Arg	Gly	Arg	Asp	Val	Glu	Arg	Ala	Leu	Thr	Arg	Phe	Met	Ala
1			5						10					15	
Lys	Thr	Gly	Glu	Thr	Gln	Ser	Leu	Phe	Lys	Asp	Asp	Val	Ser	Thr	Phe
		20						25					30		
Pro	Leu	Ile	Ala	Ala	Arg	Pro	Phe	Thr	Ile	Pro	Tyr	Leu	Thr	Ala	Leu
		35					40					45			
Leu	Pro	Ser	Glu	Leu	Glu	Met	Gln	Gln	Met	Glu	Glu	Thr	Asp	Ser	Ser
	50					55				60					
Glu	Gln	Asp	Glu	Gln	Thr	Asp	Thr	Glu	Asn	Leu	Ala	Leu	His	Ile	Ser
65					70				75					80	
Met	Glu	Asp	Ser	Gly	Ala	Glu	Lys	Glu	Asn	Thr	Ser	Val	Leu	Gln	Gln
			85						90					95	
Asn	Pro	Ser	Leu	Ser	Gly	Ser	Arg	Asn	Gly	Glu	Glu	Asn	Ile	Ile	Asp
			100					105						110	
Asn	Pro	Tyr	Leu	Arg	Pro										
			115												

<210> 1765

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1765

cgcccgcatc cttcgtgact ggcgctccgc cgccgggtgca aaagtgtcag gaaataccag  
 60  
 tcatgactat gtttagccgc acctctctgc agtatgcgat cgttctggca gcgctgggag  
 120  
 gtgcccgtct ggcgctcttg gccatgtcga gtgcgacgga ggccaatcag gcggaaattg  
 180  
 cccaggccag gccaggcatt attgcggcgg cgcgcggtgt cgtggatgtc gaggcgccg  
 240  
 tgctgaggct ctccaccag cgcgacgggg tgattcagga tgtgccggtg aaggaaggac  
 300  
 agcgggtcaa agccggcgat atcctcgccg cgctcgacaa tcgcccga ctgatcg  
 357

<210> 1766  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1766  
 Met Thr Met Phe Ser Arg Thr Ser Leu Gln Tyr Ala Ile Val Leu Ala  
 1 5 10 15  
 Ala Leu Gly Gly Ala Gly Leu Ala Leu Trp Ala Met Ser Ser Ala Thr  
 20 25 30  
 Glu Ala Asn Gln Ala Glu Ile Ala Gln Ala Arg Pro Gly Ile Ile Ala  
 35 40 45  
 Ala Ala Arg Gly Val Val Asp Val Glu Gly Gly Leu Leu Arg Leu Ser  
 50 55 60  
 Thr Gln Arg Asp Gly Val Ile Gln Asp Val Pro Val Lys Glu Gly Gln  
 65 70 75 80  
 Arg Val Lys Ala Gly Asp Ile Leu Ala Ala Leu Asp Asn Arg Arg Glu  
 85 90 95  
 Leu Ile

<210> 1767  
 <211> 297  
 <212> DNA  
 <213> Homo sapiens

<400> 1767  
 nnnccgacgac ggccgccatg acgcaccgca ttgacgtgaa ccagggcgac gatgcccaacc  
 60  
 ccggccaaca cgccaggctg cttgacgccc ccagccaacc cgacgaacgc cccaccaaga  
 120  
 acgagccccga gccatccccg gccaatcaac gccagacgta tggccacaac gagtgcgacg  
 180  
 agggacaaaac ccacctggag tccgtcggtg tgcattgcccc ccaccacgct caacgtcgtc  
 240  
 aatggacagc acaccgccag ccagagggga tgatccggat cggttccggc gtagcgn  
 297

<210> 1768  
 <211> 73  
 <212> PRT  
 <213> Homo sapiens

<400> 1768  
 Met Pro Thr Pro Ala Asn Thr Pro Gly Cys Leu Thr Pro Pro Ala Asn  
 1 5 10 15  
 Pro Thr Asn Ala Pro Pro Arg Thr Ser Pro Ser His Pro Arg Pro Ile  
 20 25 30  
 Asn Ala Arg Arg Met Ala Thr Thr Ser Ala Thr Arg Asp Lys Pro Thr  
 35 40 45  
 Trp Ser Pro Ser Leu Cys Met Pro Pro Thr Thr Leu Asn Val Val Asn  
 50 55 60  
 Gly Gln His Thr Ala Ser Gln Arg Ala

65

70

<210> 1769  
 <211> 474  
 <212> DNA  
 <213> Homo sapiens

<400> 1769  
 caccatgctg gctcggttcg acgcattcgg gtgggtgagt ctgttctcgt caccgacggg  
 60  
 cagggtcatg ccgttcgtgg ccttgccatt gaggtgacga aagggtcagt tagcgtcgag  
 120  
 accgttgaga tcctccatac tcccgcgacc acgcategat gggtcgccgt ccaggcattg  
 180  
 ccgaagtccg atagagctga gctggcggtg gcgaccctca ccgagatggg agttcacgaa  
 240  
 atcctcgctt ggcaggctga tcggagcatc gtgcgatgga agggcgacaa gcaagccaag  
 300  
 ggcgtcgcga ggtggcaagc ggctgcccgt gaggccacca aacagtctcg acgttttctt  
 360  
 gtgccacagg tagaactagc gcaaaccctg gaagttgtta agcggatttg caatgccag  
 420  
 gccgcctacg ttttgcacga gtcggccagt gaaccgctgg tgcacagga gctc  
 474

<210> 1770  
 <211> 158  
 <212> PRT  
 <213> Homo sapiens

<400> 1770  
 His His Ala Gly Ser Val Arg Arg Ile Arg Val Gly Glu Ser Val Leu  
 1 5 10 15  
 Val Thr Asp Gly Gln Gly His Ala Val Arg Gly Pro Ala Ile Glu Val  
 20 25 30  
 Thr Lys Gly Ser Val Ser Val Glu Thr Val Glu Ile Leu His Thr Pro  
 35 40 45  
 Ala Thr Thr His Arg Trp Val Ala Val Gln Ala Leu Pro Lys Ser Asp  
 50 55 60  
 Arg Ala Glu Leu Ala Val Ala Thr Leu Thr Glu Met Gly Val His Glu  
 65 70 75 80  
 Ile Leu Ala Trp Gln Ala Asp Arg Ser Ile Val Arg Trp Lys Gly Asp  
 85 90 95  
 Lys Gln Ala Lys Gly Val Ala Arg Trp Gln Ala Ala Ala Arg Glu Ala  
 100 105 110  
 Thr Lys Gln Ser Arg Arg Phe Leu Val Pro Gln Val Glu Leu Ala Gln  
 115 120 125  
 Thr Arg Glu Val Val Lys Arg Ile Cys Asn Ala Gln Ala Ala Tyr Val  
 130 135 140  
 Leu His Glu Ser Ala Ser Glu Pro Leu Val His Gln Glu Leu  
 145 150 155

<210> 1771  
 <211> 287

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1771

acgcgtgatg ggtaattcta atacatgcaa agaattatct ctgcaagtat actcagatat  
 60  
 taataacagc ggggtgctgca gaggaagaag cctgggagaa tggaagtcag ggaaggagag  
 120  
 caacaggctt ctactctgt gccatgagca tgtgctagcc atggagacac tctgcatgtt  
 180  
 acctagaact gctgattcat tgctctggaa ttattcagct attcaagacc cagtgaata  
 240  
 cagcaagcag ctttcattca tacacacaca tgtgcatcca tgtgcac  
 287

&lt;210&gt; 1772

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1772

Met	Gly	Asn	Ser	Asn	Thr	Cys	Lys	Glu	Leu	Ser	Leu	Gln	Val	Tyr	Ser
1				5					10					15	
Asp	Ile	Asn	Asn	Ser	Gly	Cys	Arg	Arg	Gly	Arg	Ser	Leu	Gly	Glu	Trp
		20					25					30			
Lys	Ser	Gly	Lys	Glu	Ser	Asn	Arg	Leu	Leu	Thr	Leu	Cys	His	Glu	His
		35				40					45				
Val	Leu	Ala	Met	Glu	Thr	Leu	Cys	Met	Leu	Pro	Arg	Thr	Ala	Asp	Ser
	50					55				60					
Leu	Leu	Trp	Asn	Tyr	Ser	Ala	Ile	Gln	Asp	Pro	Val	Lys	Tyr	Ser	Lys
65				70					75						80
Gln	Leu	Ser	Phe	Ile	His	Thr	His	Val	His	Pro	Cys	Ala			
			85						90						

&lt;210&gt; 1773

&lt;211&gt; 393

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1773

accggtgagt tctacgtccc ggtaaccac ctcggagggtg aacaggcgca cctcgacgtc  
 60  
 ttcgattctc cgcttaacga gtacgcagcg atgggatttg agtacggcta ctctgttgcc  
 120  
 cgtccggatt ctctggtatt gtgggaagcc caattcggcg atttcaccaa cggtgcccag  
 180  
 acgatcatcg atgagttcat cgcctcggct ggctccaagt ggggtcagaa gtcgggagtc  
 240  
 gtgctgctgc tgccgcacgg ttacgaaggt caggggcctg atcactcgtc ggcccgtctg  
 300  
 gagcgcttcc tcaatctatg cagtgaagac gctttggccg tctgccagcc ctcgaccccg  
 360  
 gcaagctaca gccatttatt gcgtcagcac gcg  
 393

<210> 1774  
 <211> 131  
 <212> PRT  
 <213> Homo sapiens

<400> 1774  
 Thr Gly Glu Phe Tyr Val Pro Val Asn His Leu Gly Gly Glu Gln Ala  
 1 5 10 15  
 His Leu Asp Val Phe Asp Ser Pro Leu Asn Glu Tyr Ala Ala Met Gly  
 20 25 30  
 Phe Glu Tyr Gly Tyr Ser Val Ala Arg Pro Asp Ser Leu Val Leu Trp  
 35 40 45  
 Glu Ala Gln Phe Gly Asp Phe Thr Asn Gly Ala Gln Thr Ile Ile Asp  
 50 55 60  
 Glu Phe Ile Ala Ser Ala Gly Ser Lys Trp Gly Gln Lys Ser Gly Val  
 65 70 75 80  
 Val Leu Leu Leu Pro His Gly Tyr Glu Gly Gln Gly Pro Asp His Ser  
 85 90 95  
 Ser Ala Arg Leu Glu Arg Phe Leu Asn Leu Cys Ser Glu Asp Ala Leu  
 100 105 110  
 Ala Val Cys Gln Pro Ser Thr Pro Ala Ser Tyr Ser His Leu Leu Arg  
 115 120 125  
 Gln His Ala  
 130

<210> 1775  
 <211> 369  
 <212> DNA  
 <213> Homo sapiens

<400> 1775  
 nncctccgag cagctctccg gggcagaccc cagctgcaag ccacagcccg gccctggtaa  
 60  
 cgggagggca tcgctagggg ggggtggggc ggccccgctt cgatgcagcc atgtgggagg  
 120  
 gccactctca gagaccccc gccttccttg ccacccccac ccagagggg aagctggagc  
 180  
 tgggaggctg cagacccagg ccaaggtgtg gccagggtg gctttcttgg gaggtttga  
 240  
 gcatcctgct tcctggccac ccagctctgg ggctgctgtc aactcttgat ttgtagacat  
 300  
 cactccagcc tctggcctgt caccctgaac ctccccatg tctgtgtctt ttctcactgg  
 360  
 aacaccggt  
 369

<210> 1776  
 <211> 59  
 <212> PRT  
 <213> Homo sapiens

<400> 1776  
 Arg Glu Gly Ile Ala Arg Glu Gly Trp Gly Gly Pro Ala Ser Met Gln



```

      1             5             10             15
Pro Cys Gly Arg Ala Thr Leu Arg Asp Pro Pro Pro Ser Leu Pro Pro
      20             25             30
Pro Pro Gln Arg Gly Ser Trp Ser Trp Glu Ala Ala Asp Pro Gly Gln
      35             40             45
Gly Val Ala Arg Ala Gly Phe Leu Gly Arg Leu
      50             55

```

&lt;210&gt; 1777

&lt;211&gt; 370

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1777

```

agcttcttat cactatcctt tagtgctttt tgggtctacct tagcggtaat gctccatcaa
60
gaatatgggtt ttggtagtgc aactgcggga ttttttggcc tcgctgggtgc cgccggagct
120
ttagcagcac cactgtccgg taaactaaca gataaacaag gaccgacacg ggtcacgcag
180
ctgggtgctg ccttagttgt cgtctcttct gcactctatgt tggtattgcc ttacttcagt
240
atcagtaccc aagttataat gattattggt gctaccatag tggttgactt tgggtgttcag
300
gcggcactta ttgctcatca aaccttagtg tataacattg actctaccgc tcgtggacgc
360
cttaacgcgt
370

```

&lt;210&gt; 1778

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1778

```

Ser Phe Leu Ser Leu Ser Phe Ser Ala Phe Trp Ser Thr Leu Ala Val
  1             5             10             15
Met Leu His Gln Glu Tyr Gly Phe Gly Ser Ala Thr Ala Gly Phe Phe
      20             25             30
Gly Leu Ala Gly Ala Ala Gly Ala Leu Ala Ala Pro Leu Ser Gly Lys
      35             40             45
Leu Thr Asp Lys Gln Gly Pro Thr Arg Val Thr Gln Leu Gly Ala Ala
      50             55             60
Leu Val Val Val Ser Phe Ala Ser Met Leu Leu Leu Pro Tyr Phe Ser
65             70             75             80
Ile Ser Thr Gln Val Ile Met Ile Ile Val Ala Thr Ile Val Phe Asp
      85             90             95
Phe Gly Val Gln Ala Ala Leu Ile Ala His Gln Thr Leu Val Tyr Asn
      100            105            110
Ile Asp Ser Thr Ala Arg Gly Arg Leu Asn Ala
      115            120

```

&lt;210&gt; 1779

&lt;211&gt; 345

<212> DNA  
<213> Homo sapiens

<400> 1779  
ccatgtgtgt gtatatgctc gtgtgtgatg gtatgtatat gtgtatatgt gnntatatgt  
60  
atacacgtgt gttatgggtgt gtatatatgt atatacgtgt gtgtatatat atgtatatgg  
120  
gtatgtgtgt gcatgtgcgt atgggtgtgt atatgtgtat atagttaggt gtgtatatct  
180  
gggaatatat ggggtgtgtat atgtgtgtat aggtttttat atgtggggaa atatttaaac  
240  
ctgtgtatat tggaatgtgt gtgtatatgt gtgtatatat ggnggtgtgt atgtacatgt  
300  
atgtgtgtat atagtgtgt atatacgtag gtgtgcatat gtgtg  
345

<210> 1780  
<211> 55  
<212> PRT  
<213> Homo sapiens

<400> 1780  
Pro Cys Val Cys Ile Cys Ser Cys Val Met Val Cys Ile Cys Val Tyr  
1 5 10 15  
Val Xaa Ile Cys Ile His Val Cys Tyr Gly Val Tyr Ile Cys Ile Tyr  
20 25 30  
Val Cys Val Tyr Ile Cys Ile Trp Val Cys Val Cys Met Cys Val Trp  
35 40 45  
Val Cys Ile Cys Val Tyr Met  
50 55

<210> 1781  
<211> 349  
<212> DNA  
<213> Homo sapiens

<400> 1781  
nacgcgtcat gctaaatttt gccctttatg gcaacatttt cgtcagaaca agcgggaagag  
60  
aagctactat ccaagtttca tacgccggtt aaaagaaaac atgatgatac gagatcatct  
120  
gatgtgaaca caacgcaaac tgggttcaagc gccacgcca ttacacctgt acccttactg  
180  
cccagtgcac aagagcccag ttatctttgc cagtgggtgcg ctccccagac acgaaagcac  
240  
aagacatggg aggggtgatgc tattcttata ttgcatggaa ataaaactac ttgttcgcta  
300  
cgatccgcac atgatggcag catgctagtg acgaatgctg ccttccgga  
349

<210> 1782  
<211> 107  
<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1782

```

Met Ala Thr Phe Ser Ser Glu Gln Ala Glu Glu Lys Leu Leu Ser Lys
 1           5           10           15
Phe His Thr Pro Val Lys Arg Lys His Asp Asp Thr Arg Ser Ser Asp
          20           25           30
Val Asn Thr Thr Gln Thr Gly Ser Ser Ala Thr Pro Ile Thr Pro Val
        35           40           45
Pro Leu Leu Pro Ser Ala Gln Glu Pro Ser Tyr Leu Cys Gln Trp Cys
       50           55           60
Ala Pro Gln Thr Arg Lys His Lys Thr Trp Glu Gly Asp Ala Ile Leu
      65           70           75           80
Ile Leu His Gly Asn Lys Thr Thr Cys Ser Leu Arg Ser Ala His Asp
          85           90           95
Gly Ser Met Leu Val Thr Asn Ala Ala Phe Arg
        100           105

```

&lt;210&gt; 1783

&lt;211&gt; 1829

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1783

```

gtgcacgact tcgacgccag cctctcgggc atcgggcagg aactgggcgc cggcgcttac
60
agcatgagtg atgtcttggc attgccatt ttcaagcagg aagattccag ccttcattg
120
gatggtgaaa cagagcacc accctttcag tatgtgatgt gtgctgcaac gtcaccagca
180
gtaaaaactgc atgatgaaac gcttacttat ttgaaccaag gtcagtcata tgaaattcgg
240
atgctggata atcggaatat gggatgatat cctgagatca atggaaaatt agtaaagagc
300
atcataaggg ttgtattcca tgacagacgg ctacaataca cagagcatca gcaacttgaa
360
ggatggaagt ggaatcgccc aggagacaga cttcttgatt tagatattcc aatgtctgtg
420
ggaataattg acacaaggac gaatccaggc cagttaaatt cggttgaatt tctgtgggac
480
ccagcaaaac gcacctctgc tttcattcag gtacactgca tcagcacaga atttactcca
540
cggaagcacg gaggtgaaaa gggagtgcgc tttagatcc aggttgacac ctttaagcag
600
aatgaaaatg gagaatacac agatcatcta cactcagcta gctgccaat caaagttttt
660
aagcctaaag gtgcagacag gaaacaaaaa actgaccgag agaagatgga gaagagaaca
720
gctcatgaaa aagaaaagta tcagccgtcc tatgatacca caatcctcac agagatgagg
780
cttgagccta taattgaaga tgcagttgaa catgagcaga aanaagtcca gcaagcggac
840
tttgccgcag actacggtga ttctctggca aagcgaggca gttgttctcc gtggcccgat
900

```

gccccacag cctatgtgaa taacagccct tccccagcgc ccactttcac ctccccacag  
 960  
 cagagcactt gcagtgtccc agacagcaat tcttcttccc caaatcatca gggagatgga  
 1020  
 gcttcacaga cctctgggtga acaaattcag ccttcagcta cgatccagga aacacagcaa  
 1080  
 tggctgctca aaaacagatt ctcttcctac acaagactgt tctctaattt ttcaggtgcc  
 1140  
 gacttattaa aactgacaaa ggaggattta gttcaaattt gtggtgcagc cgatggaatt  
 1200  
 cggctctata attcactgaa gtcaaggctg gtttagacccc gtttaacat ctatgtctgc  
 1260  
 cgggagcagc caagcagcac agtgctgcaa gggcagcagc aagctgcaag cagtgcgaagc  
 1320  
 gagaatggca gtggggcacc ctatgtttat catgcaatct acttggaaga aatgattgcc  
 1380  
 tcagaagttg ctgaaaaact tgcgctggtg tttaatatcc ctctccacca aattaatcag  
 1440  
 gtttacagac agggteccac cgggtattcac attcttggtta gtgatcaggt aaatcaaate  
 1500  
 atttgttttt ccttttcaga ctggtattta cttttataca tgtaattgta gaactgtaga  
 1560  
 aaaattctgt gacctctttt gaaaatactt atgagaatca ttttcagaga gttgggaate  
 1620  
 actttggaag aacttataac caagagtttc aggcaccta gtgataatat ggaatacaag  
 1680  
 ccaaggaaaa ctggcttagc ctccccccag cccttttagga tgcagccaat cactgggggc  
 1740  
 ctctagggat agtggcaggc tttggccctt tttatgaggt gagtcactgg atgtgttttc  
 1800  
 cttttgtcta ttatttgatg actaattta  
 1829

<210> 1784  
 <211> 514  
 <212> PRT  
 <213> Homo sapiens

<400> 1784  
 Val His Asp Phe Asp Ala Ser Leu Ser Gly Ile Gly Gln Glu Leu Gly  
 1 5 10 15  
 Ala Gly Ala Tyr Ser Met Ser Asp Val Leu Ala Leu Pro Ile Phe Lys  
 20 25 30  
 Gln Glu Asp Ser Ser Leu Pro Leu Asp Gly Glu Thr Glu His Pro Pro  
 35 40 45  
 Phe Gln Tyr Val Met Cys Ala Ala Thr Ser Pro Ala Val Lys Leu His  
 50 55 60  
 Asp Glu Thr Leu Thr Tyr Leu Asn Gln Gly Gln Ser Tyr Glu Ile Arg  
 65 70 75 80  
 Met Leu Asp Asn Arg Lys Met Gly Asp Met Pro Glu Ile Asn Gly Lys  
 85 90 95  
 Leu Val Lys Ser Ile Ile Arg Val Val Phe His Asp Arg Arg Leu Gln  
 100 105 110  
 Tyr Thr Glu His Gln Gln Leu Glu Gly Trp Lys Trp Asn Arg Pro Gly

```

      115      120      125
Asp Arg Leu Leu Asp Leu Asp Ile Pro Met Ser Val Gly Ile Ile Asp
130      135      140
Thr Arg Thr Asn Pro Gly Gln Leu Asn Ala Val Glu Phe Leu Trp Asp
145      150      155      160
Pro Ala Lys Arg Thr Ser Ala Phe Ile Gln Val His Cys Ile Ser Thr
      165      170      175
Glu Phe Thr Pro Arg Lys His Gly Gly Glu Lys Gly Val Pro Phe Arg
      180      185      190
Ile Gln Val Asp Thr Phe Lys Gln Asn Glu Asn Gly Glu Tyr Thr Asp
      195      200      205
His Leu His Ser Ala Ser Cys Gln Ile Lys Val Phe Lys Pro Lys Gly
      210      215      220
Ala Asp Arg Lys Gln Lys Thr Asp Arg Glu Lys Met Glu Lys Arg Thr
225      230      235      240
Ala His Glu Lys Glu Lys Tyr Gln Pro Ser Tyr Asp Thr Thr Ile Leu
      245      250      255
Thr Glu Met Arg Leu Glu Pro Ile Ile Glu Asp Ala Val Glu His Glu
      260      265      270
Gln Lys Xaa Val Gln Gln Ala Asp Phe Ala Ala Asp Tyr Gly Asp Ser
      275      280      285
Leu Ala Lys Arg Gly Ser Cys Ser Pro Trp Pro Asp Ala Pro Thr Ala
      290      295      300
Tyr Val Asn Asn Ser Pro Ser Pro Ala Pro Thr Phe Thr Ser Pro Gln
305      310      315      320
Gln Ser Thr Cys Ser Val Pro Asp Ser Asn Ser Ser Ser Pro Asn His
      325      330      335
Gln Gly Asp Gly Ala Ser Gln Thr Ser Gly Glu Gln Ile Gln Pro Ser
      340      345      350
Ala Thr Ile Gln Glu Thr Gln Gln Trp Leu Leu Lys Asn Arg Phe Ser
      355      360      365
Ser Tyr Thr Arg Leu Phe Ser Asn Phe Ser Gly Ala Asp Leu Leu Lys
      370      375      380
Leu Thr Lys Glu Asp Leu Val Gln Ile Cys Gly Ala Ala Asp Gly Ile
385      390      395      400
Arg Leu Tyr Asn Ser Leu Lys Ser Arg Ser Val Arg Pro Arg Leu Thr
      405      410      415
Ile Tyr Val Cys Arg Glu Gln Pro Ser Ser Thr Val Leu Gln Gly Gln
      420      425      430
Gln Gln Ala Ala Ser Ser Ala Ser Glu Asn Gly Ser Gly Ala Pro Tyr
      435      440      445
Val Tyr His Ala Ile Tyr Leu Glu Glu Met Ile Ala Ser Glu Val Ala
      450      455      460
Arg Lys Leu Ala Leu Val Phe Asn Ile Pro Leu His Gln Ile Asn Gln
465      470      475      480
Val Tyr Arg Gln Gly Pro Thr Gly Ile His Ile Leu Val Ser Asp Gln
      485      490      495
Val Asn Gln Ile Ile Cys Phe Ser Phe Ser Asp Trp Tyr Leu Leu Leu
      500      505      510
Tyr Met

```

&lt;210&gt; 1785

&lt;211&gt; 381

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1785

atcacggacg cagaggagaa agggctgatt actccaggcg tgagtgttct gattgaacca  
 60  
 actagcggca acacaggcat tggactggcc tttatggctg ctgccaaggg ctacaaactt  
 120  
 acactcacia tgcttgcttc catgagcatg gagaggagga tcatattgaa ggcttttggg  
 180  
 gctgaacttg tccttactga cccactcttg ggaatgaaag gagctgtcaa gaaagcggaa  
 240  
 gagatacaag caaagacacc caactcgtac atccttcaac aatttgaaaa tccagctaac  
 300  
 ccaaagattc actatgagac tactgggcct gaaatctgga aagctacagc aggaaaaatt  
 360  
 gatggccttg tatctgggat c  
 381

&lt;210&gt; 1786

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1786

Ile	Thr	Asp	Ala	Glu	Glu	Lys	Gly	Leu	Ile	Thr	Pro	Gly	Val	Ser	Val
1				5				10					15		
Leu	Ile	Glu	Pro	Thr	Ser	Gly	Asn	Thr	Gly	Ile	Gly	Leu	Ala	Phe	Met
			20				25					30			
Ala	Ala	Ala	Lys	Gly	Tyr	Lys	Leu	Thr	Leu	Thr	Met	Pro	Ala	Ser	Met
		35				40					45				
Ser	Met	Glu	Arg	Arg	Ile	Ile	Leu	Lys	Ala	Phe	Gly	Ala	Glu	Leu	Val
	50					55				60					
Leu	Thr	Asp	Pro	Leu	Leu	Gly	Met	Lys	Gly	Ala	Val	Lys	Lys	Ala	Glu
65				70				75						80	
Glu	Ile	Gln	Ala	Lys	Thr	Pro	Asn	Ser	Tyr	Ile	Leu	Gln	Gln	Phe	Glu
			85				90							95	
Asn	Pro	Ala	Asn	Pro	Lys	Ile	His	Tyr	Glu	Thr	Thr	Gly	Pro	Glu	Ile
		100					105						110		
Trp	Lys	Ala	Thr	Ala	Gly	Lys	Ile	Asp	Gly	Leu	Val	Ser	Gly	Ile	
		115				120							125		

&lt;210&gt; 1787

&lt;211&gt; 294

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1787

gtgcacacag caattcaata tgccaagaca ccagggttgca gcagagaaag atttaattgt  
 60  
 agggtcacct aacaaggaga tgagaacaaa ctttaaactct atctctctaa ggaatttgga  
 120  
 cttcgggttt ttaagggtta gaatgggcca aaacatggac attattgatt ggtcaaagag  
 180

tacagggtca tggaacctgg agatgaaaaa gccatattct catgctgac ctgttcctct  
 240  
 gtggaaggtc ttcaaattgg ttgccggaat aaaagatctg tcaaacatct tagg  
 294

<210> 1788  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 1788  
 Met Pro Arg His Gln Val Ala Ala Glu Lys Asp Leu Ile Val Gly Ser  
 1 5 10 15  
 Pro Asn Lys Glu Met Arg Thr Asn Phe Lys Ser Ile Ser Leu Arg Asn  
 20 25 30  
 Leu Asp Phe Gly Phe Leu Arg Phe Arg Met Gly Gln Asn Met Asp Ile  
 35 40 45  
 Ile Asp Trp Ser Lys Ser Thr Gly Ser Trp Asn Leu Glu Met Lys Lys  
 50 55 60  
 Pro Tyr Ser His Ala Asp Pro Val Pro Leu Trp Lys Val Phe Lys Leu  
 65 70 75 80  
 Val Ala Gly Ile Lys Asp Leu Ser Asn Ile Leu  
 85 90

<210> 1789  
 <211> 353  
 <212> DNA  
 <213> Homo sapiens

<400> 1789  
 ttccacata caccacgcg gcatgtcctg acagagatgc acaccctag cacatattca  
 60  
 cacacacaga catgccacac cccgccatcc cccacactc gtacacgcc accaccctc  
 120  
 gcaggcacac atgcacacac gcgcgcgcac acgcacacac acccccagcc cggaccggcc  
 180  
 gacctgtcc cgggggtctc tcccgaggc aggtctctc gccgagtctc cgaaaagggg  
 240  
 cggtcgtggc ggcctggcg ccagctggg caacgcttcg tggatatctc ccgcttctct  
 300  
 ctgttgtgcc cagcgccccg actgaagatc cggatcttca gtcctggcg cgc  
 353

<210> 1790  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 1790  
 Met His Thr Pro Ser Thr Tyr Ser His Thr Gln Thr Cys His Thr Pro  
 1 5 10 15  
 Pro Ser Pro His Thr Arg Thr Arg Pro Pro Pro Leu Ala Gly Thr His  
 20 25 30  
 Ala His Thr Arg Ala His Thr His Thr His Pro Gln Pro Gly Pro Ala

```

      35              40              45
Asp Leu Leu Pro Gly Val Ser Pro Ala Gly Arg Ser Pro Arg Arg Val
  50              55              60
Ser Glu Lys Gly Arg Ser Trp Arg Pro Trp Arg Pro Ala Gly Gln Arg
  65              70              75              80
Phe Val Val Ser His Arg Phe Ser Leu Leu Cys Pro Ala Pro Arg Leu
      85              90              95
Lys Ile Arg Ile Phe Ser Pro Trp Arg
      100              105

```

<210> 1791  
 <211> 355  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1791
aaatttcagt tagagattag ggaaaataaa gatgttattt tttcccatcc tagtttacag
60
accccccaga aaccactca tggattctcc cgagtctttg gacctggctc agacaccctt
120
gctttggatc aagccaatgc atgtatcccc taacacaccc atgctttatg tggtccttgc
180
ccctccctgc tcaggggact gcttggttaac ttcattgggt tggggacata tatattatag
240
gagagagaca gagaaaaaga aagagaggaa atgttattct ccttgtctgt atctgtatct
300
ccactccgat tccattcccc tctgctgctc tcctctctct cctcccttca cgcgt
355

```

<210> 1792  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1792
Met Leu Phe Phe Pro Ile Leu Val Tyr Arg Pro Pro Arg Asn Pro Leu
  1              5              10              15
Met Asp Ser Pro Glu Ser Leu Asp Leu Ala Gln Thr Pro Leu Leu Trp
      20              25              30
Ile Lys Pro Met His Val Ser Pro Asn Thr Pro Met Leu Tyr Val Val
      35              40              45
Pro Ala Pro Pro Cys Ser Gly Asp Cys Leu Leu Thr Ser Leu Gly Trp
      50              55              60
Gly His Ile Tyr Tyr Arg Arg Glu Thr Glu Lys Lys Lys Glu Arg Lys
      65              70              75              80
Cys Tyr Ser Pro Cys Leu Tyr Leu Tyr Leu His Ser Asp Ser His Ser
      85              90              95
Leu Cys Cys Ser Pro Leu Ser Pro Pro Phe Thr Arg
      100              105

```

<210> 1793  
 <211> 510  
 <212> DNA  
 <213> Homo sapiens



&lt;400&gt; 1793

tgggttccag cccgtagatg accttggcct gggaggcctt ccgaaggcca caccatattc  
 60  
 caccacctcg gagctcctcg cttaccagtc gcccaaagag cttgtccccc cagcagccag  
 120  
 agtcagccag acccttagca aacaccatag gggtcattct aatctcttct ccaacttcac  
 180  
 cttcttctct ggagatgaat cctgacaaca cctcagggtt gaggcagaag tcggtggagg  
 240  
 ccgagccgtg ctcattgtgg atggtgcacc gatacacacc gcagtctacg ggggaggcct  
 300  
 gcacgatggc caaggccgcc ggccccctcat cccctgcgct cctgcccacc tcgcccactg  
 360  
 ggcgctgac cttggcccat gtcaagactg agtcactaag aatgttgaaa aactggcacc  
 420  
 acagcttcag gctaccggag gcatcaggaa actgtccac ccgaatcttc cggatcacct  
 480  
 gtggggcttt cagcaggtct ttggctttcc  
 510

&lt;210&gt; 1794

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1794

Met Thr Leu Ala Trp Glu Ala Phe Arg Arg Pro His Pro Tyr Pro Pro  
 1 5 10 15  
 Pro Arg Ser Ser Ser Leu Thr Ser Arg Pro Lys Ser Leu Ser Pro Gln  
 20 25 30  
 Gln Pro Glu Ser Ala Arg Pro Leu Ala Asn Thr Ile Gly Val Ile Ser  
 35 40 45  
 Ile Ser Ser Pro Thr Ser Pro Ser Ser Leu Glu Met Asn Pro Asp Asn  
 50 55 60  
 Thr Ser Gly Leu Arg Gln Lys Ser Val Glu Ala Glu Pro Cys Ser Leu  
 65 70 75 80  
 Trp Met Val His Arg Tyr Thr Pro Gln Ser Thr Gly Glu Ala Cys Thr  
 85 90 95  
 Met Ala Lys Ala Ala Gly Pro Ser Ser Pro Ala Leu Leu Pro Thr Ser  
 100 105 110  
 Pro Thr Gly Arg  
 115

&lt;210&gt; 1795

&lt;211&gt; 386

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1795

ctatgctctg agtcacttct ccaagcattc ctttctgttc ttcccttcct gggctgatca  
 60  
 tttcaagaag tcctacattc cagaaaactt gagaggtgct tcttctctgg aagccccctt  
 120

tcttttctgt gagctcaggg agcattctac atacctcagc tgtgtctgct atcttttctgt  
 180  
 taattatcaa tctttccata taaacagtaa aggaccacag tttattcacc agattcccca  
 240  
 tccaaacctg cacctgcata cataaacgca ctggataaat gtaccgcagt agacagaggc  
 300  
 tctccagggt gagagctcca tgagggcacc aatttttgtc tgtttagctg tgcctcaaaa  
 360  
 gcaaggaagg gttgatccgg tctaga  
 386

<210> 1796

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1796

Met	Gln	Val	Gln	Val	Trp	Met	Gly	Asn	Leu	Met	Asn	Lys	Leu	Trp	Ser
1			5					10					15		
Phe	Thr	Val	Tyr	Met	Glu	Arg	Leu	Ile	Ile	Lys	Gln	Lys	Ile	Ala	Asp
		20					25						30		
Thr	Ala	Glu	Val	Cys	Arg	Met	Leu	Pro	Glu	Leu	Thr	Glu	Lys	Lys	Arg
		35					40					45			
Gly	Phe	Gln	Arg	Arg	Ser	Thr	Ser	Gln	Val	Phe	Trp	Asn	Val	Gly	Leu
	50				55					60					
Leu	Glu	Met	Ile	Ser	Pro	Gly	Lys	Glu	Glu	Gln	Lys	Gly	Met	Leu	Gly
65					70					75				80	
Glu	Val	Thr	Gln	Ser	Ile										
					85										

<210> 1797

<211> 348

<212> DNA

<213> Homo sapiens

<400> 1797

aagcttcact atgttgccca ttccatgggc ggcgtgctgg tgcgtgacct gctggcggac  
 60  
 cggaatttgc cgatgtcatt gatcaggtea tctgtctggg ctgcgcgcag cagggtctgc  
 120  
 gtgccgctaa tttgttggcg ccatttgcgtg gcggcgcatc cgtcaaatgg tgtatcacag  
 180  
 cgactatgtg atgccgcttg cgcccacgcc cggcagcgcg cgttgagcgc ccatcaactc  
 240  
 acagatggac aacctggtgt tgccggtgac ctccggaatt ttaccgggaa tgacctatgt  
 300  
 ggcggtggat tacctggggc attgttcggt attgtacagc ccacgcgt  
 348

<210> 1798

<211> 108

<212> PRT

<213> Homo sapiens

&lt;400&gt; 1798

```

Met Gly Gly Val Leu Val Arg Asp Leu Leu Ala Asp Arg Asn Leu Pro
 1           5           10           15
Met Ser Leu Ile Arg Ser Ser Val Trp Ala Arg Arg Ser Arg Ala Arg
          20           25           30
Val Pro Leu Ile Cys Trp Arg His Leu Leu Ala Ala His Pro Ser Asn
          35           40           45
Gly Val Ser Gln Arg Leu Cys Asp Ala Ala Cys Ala His Ala Arg Gln
          50           55           60
Arg Ala Leu Glu Arg His Gln Leu Thr Asp Gly Gln Pro Gly Val Ala
65           70           75           80
Gly Asp Leu Gly Asn Phe Thr Gly Asn Asp Pro Cys Gly Gly Gly Leu
          85           90           95
Pro Gly Ala Leu Phe Val Ile Val Gln Pro Thr Arg
          100          105

```

&lt;210&gt; 1799

&lt;211&gt; 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1799

```

acgcgctgcc tcctgctggt cgggattttc cttgctgtag ttaaccaaac caccggcgtc
60
aataccgtca tgtattacgc gcccaagggtg ttggagttcg caggaatgag caccagggcg
120
tcgattatatt cagaggtggc taatggagtc atgtctgtta ttgggtgccgc tgcaggcttg
180
tggctcatcg aacggtttga tcgtcgtcac ctgcttatct tcgatgtcac ggcggtcggc
240
gtgtgtctcc ttggtattgc ggctactttc gggctggcaa ttgctcctca tgtgggtcaa
300
gggggtaccga agtgggggcc tattctcgtg ctcgtcctga tgagtatctt catgcttacc
360
gtgcac
366

```

&lt;210&gt; 1800

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1800

```

Thr Arg Arg Leu Leu Val Gly Ile Phe Leu Ala Val Val Asn Gln
 1           5           10           15
Thr Thr Gly Val Asn Thr Val Met Tyr Tyr Ala Pro Lys Val Leu Glu
          20           25           30
Phe Ala Gly Met Ser Thr Gln Ala Ser Ile Ile Ser Glu Val Ala Asn
          35           40           45
Gly Val Met Ser Val Ile Gly Ala Ala Ala Gly Leu Trp Leu Ile Glu
          50           55           60
Arg Phe Asp Arg Arg His Leu Leu Ile Phe Asp Val Thr Ala Val Gly
65           70           75           80
Val Cys Leu Leu Gly Ile Ala Ala Thr Phe Gly Leu Ala Ile Ala Pro

```

```

      85      90      95
His Val Gly Gln Gly Val Pro Lys Trp Ala Pro Ile Leu Val Leu Val
      100      105      110
Leu Met Ser Ile Phe Met Leu Ile Val His
      115      120

```

<210> 1801  
 <211> 597  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1801
aatttctcct tcggtgacta cttcaagaac gaggccattc agtacgcatg ggagctcgtc
60
actaagccgg cagaacaggg cggattgggt ttcgatacctg ccagcatctg ggtgacggtc
120
cttggaacctg ggtttcaccc tgactatccg gagggcgaca ttgaggcgcg cgaggcgtgg
180
cgtgctgcgg gtatccctga cgagcagatt cagggctcgt cccttaagga caactactgg
240
catatggggg ttcccggccc cggcggcccc tgctcgaaa tctacatcga tcgtggccca
300
gcctatggtc ccgacgggtg tccagaagca gatgaggacc gttaccttga gatctggaac
360
ctcgtattcg agaccgagga tctctcagcg gtgcgcgcta aagatgactt cgacatcgca
420
ggccattgac gcagccttaa catcgacact ggtgccggtc tcgaacgtat tgcttaccta
480
ctccagggcg tcgacaatat gtacgagact gaccaggat tccctgtcat tgagaaagcg
540
tccgagatgt cgggcaagcg gtacggcggt cgccacgacg acgacgtccg actacgc
597

```

<210> 1802  
 <211> 199  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1802
Asn Phe Ser Phe Gly Asp Tyr Phe Lys Asn Glu Ala Ile Gln Tyr Ala
1      5      10      15
Trp Glu Leu Val Thr Lys Pro Ala Glu Gln Gly Gly Leu Gly Phe Asp
20      25      30
Pro Ala Ser Ile Trp Val Thr Val Leu Gly Pro Gly Phe His Pro Asp
35      40      45
Tyr Pro Glu Gly Asp Ile Glu Ala Arg Glu Ala Trp Arg Ala Ala Gly
50      55      60
Ile Pro Asp Glu Gln Ile Gln Gly Arg Ser Leu Lys Asp Asn Tyr Trp
65      70      75      80
His Met Gly Val Pro Gly Pro Gly Gly Pro Cys Ser Glu Ile Tyr Ile
85      90      95
Asp Arg Gly Pro Ala Tyr Gly Pro Asp Gly Gly Pro Glu Ala Asp Glu
100      105      110
Asp Arg Tyr Leu Glu Ile Trp Asn Leu Val Phe Glu Thr Glu Asp Leu

```

```

      115              120              125
Ser Ala Val Arg Ala Lys Asp Asp Phe Asp Ile Ala Gly Pro Leu Arg
      130              135              140
Ser Leu Asn Ile Asp Thr Gly Ala Gly Leu Glu Arg Ile Ala Tyr Leu
145              150              155              160
Leu Gln Gly Val Asp Asn Met Tyr Glu Thr Asp Gln Val Phe Pro Val
      165              170              175
Ile Glu Lys Ala Ser Glu Met Ser Gly Lys Arg Tyr Gly Val Arg His
      180              185              190
Asp Asp Asp Val Arg Leu Arg
      195

```

<210> 1803  
 <211> 708  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1803
cccacaacga tggccgcat ggtggatggg gaagtgcctg aggaggtcac acctaaggac
60
ctcatcctgg cctcatctc cgagatcggc accggtgggg gacaaggtca tatggtcgag
120
tatcgcgcg aggccatcga gaagatgtcg atggagggtc gcatgacgat ctgcaatatg
180
tcgattgagt ggggagctcg cgtcggcatg gttgcttctg atgagaccac cttcacctac
240
ctcaaggatc gtccgcacgc tccgcgtggt gcacagtggg acaaggctgt cgcgtactgg
300
cgcaactctg gtactgacga cgatgcgacc tttagcgctg agatccatgt ggacgcctcg
360
aatctcgccc ccttcgttac ctgggggtacc aaccgggggc agggatcccc cctaggcggt
420
gtggtgccgg ccgtcgaaga ctttgaggac gaggtagctc gcagcgagc gtttgagta
480
catggatttg accccgacga gatcggttcc cggtttgctg acatctttcg caataactct
540
gcgaacaacg gcttggtact ggctcaggtt gatcccaagg tcgtcggaga gttgtgggac
600
tttgccgagc agcatcctgg tgagcagctc accctctccc tcgagaatcg gacgattaac
660
cttcggggtc gcacgaccta cccgttccat attgatgacg tcacgcgt
708

```

<210> 1804  
 <211> 236  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1804
Pro Thr Thr Met Ala Val Met Val Asp Gly Glu Val Pro Glu Glu Val
1      5      10      15
Thr Pro Lys Asp Leu Ile Leu Ala Leu Ile Ser Glu Ile Gly Thr Gly
      20      25      30
Gly Gly Gln Gly His Met Val Glu Tyr Arg Gly Glu Ala Ile Glu Lys

```

```

<210> 1805
<211> 833
<212> DNA
<213> Homo sapiens
<400> 1805
nccgcagtggtg tgtggggacaa gaacacccggt gagccggttt ataacgccat cgtgtggcag
60
gacacgcgcga ctcaaaagat ctgtaacgaa ctagctggtg acaagggcgc cgaccgctac
120
aaggagatct gtggtctggg cctgtcgacc tatttctctg gcccgagggt caaatggatt
180
ctcgacaacg ttgagggagc cgtgctgagg gccgaggccg gcgatctgct cttcggtaac
240
atggacactt ggggtgctgtg gaacctgact ggcggtacta acggtggcgt gcacatcacc
300
gatccgacca acgcgtcccg aaccatgctc atggacgtcc gaaagctgca gtgggacgac
360
tcgatgtgcg aggtcatggg aattccaaag tccatgcttc ctgagatcaa gtcctcctcc
420
gagatctacg gctatggctg caagaacggc ctgctgatcg ataccgccat ctccggcatt
480
cttggcgatc agcaggccgc cacctttggc caggcttgct tccaaaaggg catggcgaag
540
aacacgtacg gcaccggctg cttcatgctc atgaacacag gtgaggaggc catcttctcc
600
gagaacggtc tgctgaccac cgtctgctac aagattggtg accagcccac cgtctatgcc
660

```

ctggaagggtt cgatcgccgt cgctggatcg ctggtacagt ggctgcgcga caacctcaag  
 720  
 atgttcgaga ccgccccgca aatcgaagcc ctgcgaaca ccgtcgagga caatgggtggc  
 780  
 gcttactttg tgccggcctt ctctggcctg ttgcgcgcgt actggcgctcc gga  
 833

<210> 1806

<211> 277

<212> PRT

<213> Homo sapiens

<400> 1806

Xaa	Ala	Val	Val	Trp	Asp	Lys	Asn	Thr	Gly	Glu	Pro	Val	Tyr	Asn	Ala
1				5					10					15	
Ile	Val	Trp	Gln	Asp	Thr	Arg	Thr	Gln	Lys	Ile	Cys	Asn	Glu	Leu	Ala
			20					25					30		
Gly	Asp	Lys	Gly	Ala	Asp	Arg	Tyr	Lys	Glu	Ile	Cys	Gly	Leu	Gly	Leu
		35					40					45			
Ser	Thr	Tyr	Phe	Ser	Gly	Pro	Lys	Val	Lys	Trp	Ile	Leu	Asp	Asn	Val
	50					55					60				
Glu	Gly	Ala	Arg	Ala	Arg	Ala	Glu	Ala	Gly	Asp	Leu	Leu	Phe	Gly	Asn
65					70					75					80
Met	Asp	Thr	Trp	Val	Leu	Trp	Asn	Leu	Thr	Gly	Gly	Thr	Asn	Gly	Gly
				85					90					95	
Val	His	Ile	Thr	Asp	Pro	Thr	Asn	Ala	Ser	Arg	Thr	Met	Leu	Met	Asp
			100					105					110		
Val	Arg	Lys	Leu	Gln	Trp	Asp	Asp	Ser	Met	Cys	Glu	Val	Met	Gly	Ile
		115					120					125			
Pro	Lys	Ser	Met	Leu	Pro	Glu	Ile	Lys	Ser	Ser	Ser	Glu	Ile	Tyr	Gly
			130				135					140			
Tyr	Gly	Arg	Lys	Asn	Gly	Leu	Leu	Ile	Asp	Thr	Pro	Ile	Ser	Gly	Ile
145					150					155					160
Leu	Gly	Asp	Gln	Gln	Ala	Ala	Thr	Phe	Gly	Gln	Ala	Cys	Phe	Gln	Lys
				165					170					175	
Gly	Met	Ala	Lys	Asn	Thr	Tyr	Gly	Thr	Gly	Cys	Phe	Met	Leu	Met	Asn
			180					185				190			
Thr	Gly	Glu	Glu	Ala	Ile	Phe	Ser	Glu	Asn	Gly	Leu	Leu	Thr	Thr	Val
		195					200					205			
Cys	Tyr	Lys	Ile	Gly	Asp	Gln	Pro	Thr	Val	Tyr	Ala	Leu	Glu	Gly	Ser
		210				215					220				
Ile	Ala	Val	Ala	Gly	Ser	Leu	Val	Gln	Trp	Leu	Arg	Asp	Asn	Leu	Lys
225					230					235					240
Met	Phe	Glu	Thr	Ala	Pro	Gln	Ile	Glu	Ala	Leu	Ala	Asn	Thr	Val	Glu
				245					250					255	
Asp	Asn	Gly	Gly	Ala	Tyr	Phe	Val	Pro	Ala	Phe	Ser	Gly	Leu	Phe	Ala
			260					265					270		
Pro	Tyr	Trp	Arg	Pro											
			275												

<210> 1807

<211> 420

<212> DNA

<213> Homo sapiens

<400> 1807  
 nnntatcggc aaggtggtcg aaatggctct tgactatgtc aacggtgaca cgtgcgccgc  
 60  
 gaccgccccca ttcatttgtc gtttgacgtc gacgcgatgg accctagcgt ggccccgagc  
 120  
 acaggcacac cggtgcgtagg tgggtctcaca ttccgagaag gccactacat atgcgaggcg  
 180  
 gtagctgaga ccggctcgtt ggtggctatg gatatggtag aagtcaaccc ccatcttgaa  
 240  
 aagcatgcgg ctgagcagac gatcgccgtg ggttggtccc tcattcgttc ggcgctgggg  
 300  
 gagacgcttc tgtaatgggt gcatgatggg ccggtggtcc atagccatgc atagacactc  
 360  
 cgggcgctga tatgatgagt gacatagcac gtacgataaa tctcggtttt gagcacgcgt  
 420

<210> 1808  
 <211> 88  
 <212> PRT  
 <213> Homo sapiens

<400> 1808  
 His Val Arg Arg Asp Arg Pro Ile His Leu Ser Phe Asp Val Asp Ala  
 1 5 10 15  
 Met Asp Pro Ser Val Ala Pro Ser Thr Gly Thr Pro Val Arg Gly Gly  
 20 25 30  
 Leu Thr Phe Arg Glu Gly His Tyr Ile Cys Glu Ala Val Ala Glu Thr  
 35 40 45  
 Gly Ser Leu Val Ala Met Asp Met Val Glu Val Asn Pro His Leu Glu  
 50 55 60  
 Lys His Ala Ala Glu Gln Thr Ile Ala Val Gly Cys Ser Leu Ile Arg  
 65 70 75 80  
 Ser Ala Leu Gly Glu Thr Leu Leu  
 85

<210> 1809  
 <211> 340  
 <212> DNA  
 <213> Homo sapiens

<400> 1809  
 nnaccggtga tcgcatcggg gagcctcggc gcgatgcgcg tggtcgacct tcgccatcgc  
 60  
 cagaccggtg tcacgcatgc gtatcgcttc gggcatggca gcctcctcgt gatgcggggc  
 120  
 cccaccagg ccgaatggca gcacgcgtg ccgaaagcgc cgggtgtgca gggcgagcgc  
 180  
 gtgaacctga cgtttcggcg cgtgatgccg gtcggtatgg gccggtaaca accggcgctc  
 240  
 ccgaggtgcc cggatcgccg ggcgattcgc gccccgtttt cgcgattcat gcgcgatcga  
 300  
 tacgggcagg cggtcgcatg tgcggcacgt tgccgcacgn  
 340



<210> 1810  
 <211> 75  
 <212> PRT  
 <213> Homo sapiens

<400> 1810  
 Xaa Pro Val Ile Ala Ser Val Ser Leu Gly Ala Met Arg Val Phe Asp  
 1 5 10 15  
 Leu Arg His Arg Gln Thr Gly Val Thr His Ala Tyr Arg Leu Gly His  
 20 25 30  
 Gly Ser Leu Leu Val Met Arg Gly Pro Thr Gln Ala Glu Trp Gln His  
 35 40 45  
 Arg Val Pro Lys Ala Pro Gly Val Gln Gly Glu Arg Val Asn Leu Thr  
 50 55 60  
 Phe Arg Arg Val Met Pro Val Gly Met Gly Arg  
 65 70 75

<210> 1811  
 <211> 500  
 <212> DNA  
 <213> Homo sapiens

<400> 1811  
 nnacgcgtgc taggaatagc catggactca tcatcagata catgctggat ttataactca  
 60  
 ctgggtggat tgtatgagct gtcgtaaaa gatgaggctc gcgatatgtg gcatttgttg  
 120  
 ctgaaacggt gcgactttga gaaggcacta acattttgtc gtgatgagac gtgtcggaag  
 180  
 cagggtactgg aaaagaaggc cgatgcactg ctacacgcag gtcagctcat ggaggccgctc  
 240  
 gagtgtatg ctcaggccca gacaccggcc tttgaacagg ttgtgctttc tttgatggac  
 300  
 gtctgtgccg acaaggcatt gcgtcgatat gtcagactgc gtctcgacaa gatgccgaaa  
 360  
 caagctcgcg tgctctgtct catgctggct acttggtcca ttgaattgta tgtggccgcc  
 420  
 attcaagcgc atgaaccac ctccgaacat taccagacac ttttgctgga agcccaggag  
 480  
 acacttgagc ggcatcatga  
 500

<210> 1812  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1812  
 Xaa Arg Val Leu Gly Ile Ala Met Asp Ser Ser Ser Asp Thr Cys Trp  
 1 5 10 15  
 Ile Tyr Thr Ser Leu Gly Gly Leu Tyr Glu Leu Leu Val Lys Asp Glu  
 20 25 30  
 Ala Arg Asp Met Trp His Leu Leu Leu Lys Arg Cys Asp Phe Glu Lys

```

      35              40              45
Ala Leu Thr Phe Cys Arg Asp Glu Thr Cys Arg Lys Gln Val Leu Glu
  50              55              60
Lys Lys Gly Asp Ala Leu Leu His Ala Gly Gln Leu Met Glu Ala Val
  65              70              75              80
Glu Cys Tyr Ala Gln Ala Gln Thr Pro Ala Phe Glu Gln Val Val Leu
      85              90              95
Ser Leu Met Asp Val Cys Ala Asp Lys Ala Leu Arg Arg Tyr Val Arg
      100              105              110
Leu Arg Leu Asp Lys Met Pro Lys Gln Ala Arg Val Pro Arg Leu Met
      115              120              125
Leu Ala Thr Trp Leu Ile Glu Leu Tyr Val Ala Ala Ile Gln Ala His
      130              135              140
Glu Pro Thr Ser Glu His Tyr Gln Thr Leu Leu Leu Glu Ala Gln Glu
      145              150              155              160
Thr Leu Glu Arg His His
      165

```

<210> 1813  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1813
tctagagccg ttgtgatcgg tatccatggt tggatgggggt tcatctcgat ggaggagtgt
60
gtcctgaggg gtggcagtga cctggtaggg gtgcctgcgg cgtcgcggct tgcgatcgct
120
ggttctcggg gatgactctc ggatgaatat agatctgcta agacgtcatt agattcgctt
180
ggcgcttggt tgggaacggg tgtgaagcag ccttctgatg gatgtatttt tgcgttggtt
240
aataaggttt caatattaat tgaatatggc gctagatgct ggtttaggat cagttgacgt
300
ccgctgtaga tcttccctat ggtcattctg gggccaggcg cttcgccagc tggccatcgc
360
aacaatggtg tggcgaaggg ttatgaggtg agtatggctg agcaagtcgt tggacaggcg
420
tctaca
426

```

<210> 1814  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1814
Met Thr Ile Gly Arg Ile Tyr Ser Gly Arg Gln Leu Ile Leu Asn Gln
  1              5              10              15
His Leu Ala Pro Tyr Ser Ile Asn Ile Glu Thr Leu Phe Asn Asn Ala
      20              25              30
Lys Ile His Pro Ser Glu Gly Cys Phe Thr Pro Val Pro Asn Gln Ala
      35              40              45
Pro Ser Glu Ser Asn Asp Val Leu Ala Asp Leu Tyr Ser Ser Glu Ser

```

```

      50              55              60
His Pro Arg Glu Pro Ala Ile Ala Ser Arg Asp Ala Ala Gly Thr Pro
65              70              75              80
Thr Arg Ser Leu Pro Pro Leu Arg Thr His Ser Ser Ile Glu Met Asn
      85              90              95
Pro Ile Gln Pro Trp Ile Pro Ile Thr Thr Ala Leu
      100              105

```

<210> 1815  
 <211> 303  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1815
ggcgcccaca tggctacgct cgcaccgcgg cacaaggtaa gccgtagcgg cgggacgcgag
60
cgccaggccg cgcacatcctcg catggagcgc gatcagttcg gccatcatcg cgtcgtcggg
120
cgtgccgatc tcgaggggca acgccgcgcc gagccgcgaa gccagatcgg gcagcgcgat
180
ccgccagcca tcggcaaatt cgcgagtgat gacgagcaag ggccgcctgg tctcctgcgc
240
ccggttccag cagtgaaca cgttcgcctc gggcagacgg gcggcatcgg cgatcacggt
300
acc
303

```

<210> 1816  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1816
Met Ala Thr Leu Ala Pro Arg His Lys Val Ser Arg Ser Gly Gly Ile
1      5      10      15
Glu Arg Gln Ala Ala His Leu Gly Met Glu Arg Asp Gln Phe Gly His
      20      25      30
His Arg Val Val Gly Arg Ala Asp Leu Glu Gly Gln Arg Arg Ala Glu
      35      40      45
Pro Arg Ser Gln Ile Gly Gln Arg Asp Pro Pro Ala Ile Gly Lys Phe
50      55      60
Ala Ser Asp Asp Glu Gln Gly Pro Pro Gly Leu Leu Arg Pro Val Pro
65      70      75      80
Ala Val Glu His Val Arg Leu Gly Gln Thr Gly Gly Ile Gly Asp His
      85      90      95
Gly Thr

```

<210> 1817  
 <211> 413  
 <212> DNA  
 <213> Homo sapiens

<400> 1817

nncagcttgc aagaccgcg cccacacagtg tacatcttaa catcacattt cgatgcgtcg  
60  
catgcgtttg agcccacacg ccatggcaca cttcaggtca ttcacgcaa gacatggatc  
120  
ccgcgctect tatttcacat gctgcatctg ccatggccat tcgcagcagt ttttctctt  
180  
gtgatgcagg tcgtggtagc agcgtatgga tcgtcactcg cagccactt gccgcatgtg  
240  
tacaggcggt gacgcattgc ccgtcaaaact cgtcccaga cgtgtttgtt attgaccaac  
300  
ttccagcagc gatacccta atcaaaactcc tgtgtgggag cgtgtcatg tactactgtc  
360  
acttccctga caaagaaatc agcgtgctc tggctcgaca gcgaggcacg cgt  
413

&lt;210&gt; 1818

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1818

Xaa	Ser	Leu	Gln	Asp	Arg	Gly	His	Thr	Val	Tyr	Ile	Leu	Thr	Ser	His
1			5						10					15	
Phe	Asp	Ala	Ser	His	Ala	Phe	Glu	Pro	Thr	Arg	Asp	Gly	Thr	Leu	Gln
			20					25					30		
Val	Ile	His	Ala	Lys	Thr	Trp	Ile	Pro	Arg	Ser	Leu	Phe	His	Met	Leu
		35					40					45			
His	Leu	Arg	Trp	Pro	Phe	Ala	Ala	Val	Phe	Ser	Leu	Val	Met	Gln	Val
	50					55					60				
Val	Val	Ala	Ala	Tyr	Gly	Ser	Ser	Leu	Ala	Arg	His	Leu	Pro	His	Val
65					70					75				80	
Tyr	Arg	Ala													

&lt;210&gt; 1819

&lt;211&gt; 343

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1819

ggatccaaga gtggggcatc aggaacatgc catggttgct gtggtgctgg aatgagaaca  
60  
atcacaagac agataggcct tggcatgac caacagatga acactgtttg ccctgaatgc  
120  
aaaggatcag gtgagatcat aagtgacaag gacaaatgcc caagctgtaa aggaaacaaa  
180  
gtagtccagg agaagaagggt gttagagggt catgtggaga aaggaatgca acataaccaa  
240  
aagattgtat tccagggtca ggctgatgaa gctcctgata cgggtacagg agacattggt  
300  
tttgtcttgc aacttaaaga ccatccaaaa ttaagagga tgt  
343

&lt;210&gt; 1820

<211> 114  
 <212> PRT  
 <213> Homo sapiens

<400> 1820  
 Gly Ser Lys Ser Gly Ala Ser Gly Thr Cys His Gly Cys Arg Gly Ala  
 1 5 10 15  
 Gly Met Arg Thr Ile Thr Arg Gln Ile Gly Leu Gly Met Ile Gln Gln  
 20 25 30  
 Met Asn Thr Val Cys Pro Glu Cys Lys Gly Ser Gly Glu Ile Ile Ser  
 35 40 45  
 Asp Lys Asp Lys Cys Pro Ser Cys Lys Gly Asn Lys Val Val Gln Glu  
 50 55 60  
 Lys Lys Val Leu Glu Val His Val Glu Lys Gly Met Gln His Asn Gln  
 65 70 75 80  
 Lys Ile Val Phe Gln Gly Gln Ala Asp Glu Ala Pro Asp Thr Gly Thr  
 85 90 95  
 Gly Asp Ile Val Phe Val Leu Gln Leu Lys Asp His Pro Lys Phe Lys  
 100 105 110  
 Arg Met

<210> 1821  
 <211> 285  
 <212> DNA  
 <213> Homo sapiens

<400> 1821  
 aagcttgagt tcagcaagat cttggaggct attaaggcaa acttcaacga caagttcgat  
 60  
 gaggtcggga agaagtgggg aggtggcatc atgggatcca agtcgcaggc caagaccaag  
 120  
 gccccggaaa agttgctcgc caaggaggcc gccacgcgga tgacctagat tgtctactgc  
 180  
 tgtgtctgcc ctgtagtttg acggggaaga actgatgaac tcgtattgtg gttttccgaa  
 240  
 tctagtttca tatgtttctg tccaccagac catgtttaga agctt  
 285

<210> 1822  
 <211> 55  
 <212> PRT  
 <213> Homo sapiens

<400> 1822  
 Lys Leu Glu Phe Ser Lys Ile Leu Glu Ala Ile Lys Ala Asn Phe Asn  
 1 5 10 15  
 Asp Lys Phe Asp Glu Val Gly Lys Lys Trp Gly Gly Gly Ile Met Gly  
 20 25 30  
 Ser Lys Ser Gln Ala Lys Thr Lys Ala Arg Glu Lys Leu Ala Lys  
 35 40 45  
 Glu Ala Ala Gln Arg Met Thr  
 50 55

<210> 1823  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 1823  
 ngttggctgc tgttgctggg cgttctgtcc ctgacgggct gcgcccgctc cgatgcgctg  
 60  
 tggggcgctgg tcgataagct ctgcatggcc aactatcagc aaaagcgcga tccggccccg  
 120  
 tgtgagcaga tttatatgcc gcagggtaaa gcgcagggtc ttagcgtgct gcaaaacccg  
 180  
 cgttatccct atcatttcat tctggtgccg acggcgccgc tttccggcat tgaaagcccg  
 240  
 ctgctgctgg ccggagagcg aacggactat tttggctatg catggctgat gcgttacccg  
 300  
 ctggccgccg agtatggcgg gccggtgccg gacgacaggc tgggcatggc gatcaactcc  
 360  
 gcttacggcc gcagccagaa ccaattg  
 387

<210> 1824  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 1824  
 Xaa Trp Leu Leu Leu Gly Val Leu Ser Leu Thr Gly Cys Ala Arg  
 1 5 10 15  
 Ser Asp Ala Leu Trp Gly Val Val Asp Lys Leu Cys Met Ala Asn Tyr  
 20 25 30  
 Gln Gln Lys Arg Asp Pro Ala Pro Cys Glu Gln Ile Tyr Met Pro Gln  
 35 40 45  
 Gly Lys Ala Gln Gly Phe Ser Val Leu Gln Asn Pro Arg Tyr Pro Tyr  
 50 55 60  
 His Phe Ile Leu Val Pro Thr Ala Pro Leu Ser Gly Ile Glu Ser Pro  
 65 70 75 80  
 Leu Leu Leu Ala Gly Glu Arg Thr Asp Tyr Phe Gly Tyr Ala Trp Leu  
 85 90 95  
 Met Arg Tyr Arg Leu Ala Ala Glu Tyr Gly Gly Pro Val Pro Asp Asp  
 100 105 110  
 Arg Leu Gly Met Ala Ile Asn Ser Ala Tyr Gly Arg Ser Gln Asn Gln  
 115 120 125  
 Leu

<210> 1825  
 <211> 413  
 <212> DNA  
 <213> Homo sapiens

<400> 1825  
 gtgcacggac gaccgcgcac agggactcgt gtgccgcgca tgggacgacg gcgatgcgtg  
 60

tgcgtgcata cgcgtgctct ggcaggctgt gcgtgcgatt gtcgccgaca catcggcggc  
 120  
 ttggcacgtc gtgattgggc gcctaggcac catgtcgcag gccgacatgg acatgtgggc  
 180  
 gtcgtgcttc gatacgcgcg acccttcctg ctctcggtag gccttgtagt cctggagcgc  
 240  
 gatgcctggc ctacgggcac gcgatgcac ggtggtctac ctgtcggaca tgccgctggg  
 300  
 tctggcctca ggtgcgtggc cgatccgctg gcctcgtcgc gcgttatgtg tctgccggcg  
 360  
 cctatgccat tcattctgtg cagctacgtc acctggctga tctcgacgcg gct  
 413

<210> 1826

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1826

Met	Gly	Arg	Arg	Arg	Cys	Val	Cys	Val	His	Thr	Ala	Ala	Leu	Ala	Gly
1					5				10					15	
Arg	Ala	Cys	Asp	Cys	Arg	Arg	His	Ile	Gly	Gly	Leu	Ala	Arg	Arg	Asp
		20						25					30		
Trp	Ala	Pro	Arg	His	His	Val	Ala	Gly	Arg	His	Gly	His	Val	Gly	Val
		35					40					45			
Val	Pro	Arg	Tyr	Ala	Arg	Pro	Phe	Leu	Leu	Ser	Val	Gly	Leu	Val	Cys
		50				55					60				
Leu	Glu	Arg	Asp	Ala	Trp	Pro	Thr	Gly	Thr	Arg	Cys	Ile	Gly	Gly	Leu
65				70					75					80	
Pro	Val	Gly	His	Ala	Ala	Gly	Ser	Gly	Leu	Arg	Cys	Val	Ala	Asp	Pro
			85						90					95	
Arg	Ala	Ser	Leu	Gly	Val	Met	Cys	Leu	Pro	Ala	Pro	Met	Pro	Phe	Ile
			100					105					110		
Ser	Cys	Ser	Tyr	Val	Thr	Trp	Leu	Ile	Ser	Thr	Arg				
			115				120								

<210> 1827

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1827

ctggccaact gggcgccgga cctgttcatt aagcgcgtcg aagccgacca ggaatggctg  
 60  
 ctgttcgata cgcgcgtggg gccggagttc accgacctgt tcggcgaagc cttcgaagcc  
 120  
 gcctacctgc aggccgaagc gcagggcaag gcccaaccga cgatctctgc ccgcaagctg  
 180  
 tacgcccgcg tgatgcgtac gctggccgag accggcaacg gctggatgac cttcaaggac  
 240  
 aagtgcacc gcgccagcaa ccagaccctg cgtccgggca acgtgatcca cctgtccaac  
 300  
 ctgtgcaccg aaatcctgga agtcacttcc aacgatgaaa ccgcg  
 345

<210> 1828  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 1828  
 Leu Ala Asn Trp Val Pro Asp Leu Phe Met Lys Arg Val Glu Ala Asp  
 1 5 10 15  
 Gln Glu Trp Ser Leu Phe Asp Pro Arg Val Val Pro Glu Phe Thr Asp  
 20 25 30  
 Leu Phe Gly Glu Ala Phe Glu Ala Ala Tyr Leu Gln Ala Glu Ala Gln  
 35 40 45  
 Gly Lys Ala Asn Arg Thr Ile Ser Ala Arg Lys Leu Tyr Ala Arg Met  
 50 55 60  
 Met Arg Thr Leu Ala Glu Thr Gly Asn Gly Trp Met Thr Phe Lys Asp  
 65 70 75 80  
 Lys Cys Asn Arg Ala Ser Asn Gln Thr Leu Arg Pro Gly Asn Val Ile  
 85 90 95  
 His Leu Ser Asn Leu Cys Thr Glu Ile Leu Glu Val Thr Ser Asn Asp  
 100 105 110  
 Glu Thr Ala  
 115

<210> 1829  
 <211> 4457  
 <212> DNA  
 <213> Homo sapiens

<400> 1829  
 attccaatgg ttgtgtctga ttttgatctt ccagaccaac agatagaaat acttcagagt  
 60  
 tctgactcgg gatgttcaca gtctctgct ggggacaact tgagttacga agttgatcct  
 120  
 gaaaccgtga atgccaaga ggattctcaa atgccaagg aaagctcccc agatgatgat  
 180  
 gttcaacagg tagtatttga cctgatatgt aaagttgtaa gtggcctcga agtggaatct  
 240  
 gcatcagtta catctcaatt agaaattgaa gctatgcccc caaagtgcag tgatatagat  
 300  
 ccagatgaag agacgattaa aattgaagat gactccattc gacagagtca gaatgctttg  
 360  
 ctgagtaatg aaagttctca gtttctgtct gtgtctgcag agggaggcca tgagtgtgtg  
 420  
 gcaaattggaa tctccaggaa tagctcctca ccttgatatt caggaaccac acacactctt  
 480  
 catgactctt ctgttgcttc catagaaacc aaatctagac aaaggagtca cagtagtatt  
 540  
 caattcagct tcaaagaaaa attatcagaa aaagtttcgg agaaggaaac aatagttaag  
 600  
 gagtcaggta aacaaccagg agcaaacct aaagtaaaac ttgccagaaa aaaggatgat  
 660  
 gacaagaaaa aatcttcaaa tgaaaaactc aaacaaacca gtgtattctt cagtgatggg  
 720



ctggatttag agaactggta tagctgtgga gagggagaca tttctgaaat tgagagtgaac  
780  
atgggttctc caggatctcg aaaatctccc aatttcaaca ttcactctct ctatcaacat  
840  
gtgtccctgt atctccagtt gtatgattca tccaggactt tgtatgcttt ctctgccatc  
900  
aaagccatct tgaaaactaa ccctatagct tttgtaaatg ccatttcaac tactagtgtg  
960  
aataatgcat atactcctca gtgtctctc cttcagaatc tattggccag acaccggatt  
1020  
tctgttatgg gcaaagattt ttatagtcac attccagtgg actcaaatca taacttccgg  
1080  
agttctatgt acatagaaat tcttatttct ctctgcttat attacatgcg tagccattac  
1140  
ccaactcatg tcaaggttac tgcacaagat ttaataggca atcgaaacat gcaaagtatg  
1200  
agcatagaaa ttctgacact actcttcact gagctggcaa aagtaataga aagctcagcg  
1260  
aagggtttcc ctagtcttat ttctgatatg ttatctaagt gcaaagttca gaaagtgatt  
1320  
cttcattggt tgctgtcatc tatctttagt gctcagaaat ggcatagtga aaaaatggca  
1380  
ggtaagaacc tggttgctgt ggaagaaggc ttctcagagg acagccttat taatttctca  
1440  
gaggatgaat ttgacaatgg cagcacgttg cagtcacaac ttcttaaggt gcttcagagg  
1500  
ctgattgttc tagaacacag agtaatgact attcctgaag agaatgaaac aggttttgat  
1560  
tttgttgat ctgacttaga acacatcagt ccccatcaac ccatgacttc tcttcagtat  
1620  
ttgcagtctc agccaatcac atgtcaaggc atgttctctc gtgcagtgat acgagctttg  
1680  
catcagcact gtgcatgtaa gatgcaccca caatggattg gtttaatcac atctactctg  
1740  
ccttacatgg gaaaagttct gcagagagtg gttgtttctg tgacactaca actgtgcaga  
1800  
aatttagata atctaattca gcagtacaaa tacgaaacag gattatctga tagtaggcct  
1860  
ctgtggatgg catcaattat tccaccagat atgattctta ctcttttggg agggattaca  
1920  
gccattatcc attactgttt gttggatcca actacacagt atcaccaact tttggtcagt  
1980  
gtagaccaga aacacttggt tgaagcacgc agtggaatcc tctcaatcct tcatatgac  
2040  
atgtcctctg tgacactgct ttggagcata ctgcatcaag ctgattcttc agaaaagatg  
2100  
actattgccg catccgcac tcttaccact attaatcttg gagctacaaa gaacttgaga  
2160  
caacagattc ttgaattggt gggccccatt tcaatgaatc atgggtgttc ctttatggct  
2220  
gccattgcat ttgtgtggaa tgaaagaaga cagaataaaa caaccaccag gaccaaggtc  
2280  
attcctgcag ccagtgaaga acagctttta ttagtggaat tgggttcgtc aatcagtgtc  
2340

atgagagcag aaactgttat ccagactgta aaagaagttt taaagcagcc accagccata  
2400  
gccaaaggaca agaaacatct ttctttggaa gtctgcatgc ttcagttttt ctatgcttat  
2460  
attcaaagaa ttccagtgcc caatttagtg gatagctggg cgtcactggt gatacttctg  
2520  
aaagactcta tacaactgag tcttccagct ccagggcagt ttcttatact tggggttctg  
2580  
aatgagttta ttatgaaaaa ccctagtttg gaaaataaaa aagaccaaag agaccttcag  
2640  
gatgtaactc acaaaatagt ggatgcaatt ggtgcaattg ctggttcttc tctggaacag  
2700  
acaacatggc tgcgacgaaa tcttgaagtt aagccttctc ccaaaataat ggtagatgga  
2760  
accaatttgg aatctgatgt tgaagatatg ttatcacctg caatggaaac cgcaaacata  
2820  
actccttctg tatatagtgt ccatgcattg acattactct ctgaggtttt ggctcatctt  
2880  
ttggatatgg ttttctatag tgatgaaaag gagcgggtta ttccctttact tgtaaattt  
2940  
atgcattatg ttgtgcccta cctcagaaat cacagtgcac ataatgcccc tagttatcga  
3000  
gcttgtgtcc agctgctcag cagtcttagt gggatatcagt acacacggag agcttgga  
3060  
aaagaagctt ttgacctctt tatggatccc agtttcttct agatggatgc ctcttgtgtt  
3120  
aatcattgga gagcaattat ggacaatctg atgacacatg ataaaacaac atttagagat  
3180  
ttgatgactc gtgtagcagt ggctcaaagc agttcactta atctctttgc aaaccgtgat  
3240  
gtggagctag aacagagagc tatgcttctt aaaagattag catttgctat ttttagcagt  
3300  
gaaattgacc agtaccagaa atatcttcca gatatacaag agagattggt tgagagtctc  
3360  
cgtttgccac aggtgccaac tctccattct caagtgttcc tgtttttcag agtgttactt  
3420  
ttaagaatgt ctccccaaaca tcttacctca ctctggccta ccatgattac agaacttgta  
3480  
caagtatttt tactgatgga gcaggaaactc actgetgatg aagatatttc acggacttca  
3540  
gggccctctg tggctgggtc ggagacaacg tacacaggag gtaatggctt ctctacttca  
3600  
tataacagcc agcgggtggtt aaacctctat ctctctgctt gcaaattttt ggatttggct  
3660  
ctgcattgc cctctgaaaa ccttctctcag tttcagatgt accgatgggc ctttattcca  
3720  
gaagcctcag atgattcagg tttggaagtc agaaggcagg gtatacatca acgagaattt  
3780  
aaaccttacg tggtagact agcaaaactt cttcggaata gagcaaagaa aaatccagag  
3840  
gaagacaact cagggagaac attgggttgg gagccagggc acttgctgct caccatctgc  
3900  
accgtgcgca gtatggagca gctcctgccg ttcttcaatg tgctcagtca agtcttcaac  
3960

agcaaagtca caagccgatg tggaggacac tcagggagtc ctatcctcta ctcaaagtgc  
 4020  
 ttccctaata aggacatgaa actggagaac cacaaccat gttccagcaa agccaggcaa  
 4080  
 aaaatagaag agatggtaga aaaagatttt ctggaagga tgataaaaac ttgagcacca  
 4140  
 ttgtcgttc catttagctt acatgtaa atgtaattttt aaaacacaca cactgctctg  
 4200  
 cgtgtatag tttttccttt tttgtatgta acagaacaca tttcagattg tatttaattt  
 4260  
 aaatatttgt atataagagc aaatgtctga atgtggcctg aatcaagttt aaatattgtt  
 4320  
 ggctcactact gattatgggtg cctaagagag ctatatatat acacatgtaa agtcattgt  
 4380  
 ttttattgtc ctgagttgtc ttaaacctgc aaaatataca ctaccattt tttttttcaa  
 4440  
 aaaaaaaaaa aaaaaaa  
 4457

<210> 1830  
 <211> 1377  
 <212> PRT  
 <213> Homo sapiens

<400> 1830  
 Ile Pro Met Val Val Ser Asp Phe Asp Leu Pro Asp Gln Gln Ile Glu  
 1 5 10 15  
 Ile Leu Gln Ser Ser Asp Ser Gly Cys Ser Gln Ser Ser Ala Gly Asp  
 20 25 30  
 Asn Leu Ser Tyr Glu Val Asp Pro Glu Thr Val Asn Ala Gln Glu Asp  
 35 40 45  
 Ser Gln Met Pro Lys Glu Ser Ser Pro Asp Asp Asp Val Gln Gln Val  
 50 55 60  
 Val Phe Asp Leu Ile Cys Lys Val Val Ser Gly Leu Glu Val Glu Ser  
 65 70 75 80  
 Ala Ser Val Thr Ser Gln Leu Glu Ile Glu Ala Met Pro Pro Lys Cys  
 85 90 95  
 Ser Asp Ile Asp Pro Asp Glu Glu Thr Ile Lys Ile Glu Asp Asp Ser  
 100 105 110  
 Ile Arg Gln Ser Gln Asn Ala Leu Leu Ser Asn Glu Ser Ser Gln Phe  
 115 120 125  
 Leu Ser Val Ser Ala Glu Gly Gly His Glu Cys Val Ala Asn Gly Ile  
 130 135 140  
 Ser Arg Asn Ser Ser Ser Pro Cys Ile Ser Gly Thr Thr His Thr Leu  
 145 150 155 160  
 His Asp Ser Ser Val Ala Ser Ile Glu Thr Lys Ser Arg Gln Arg Ser  
 165 170 175  
 His Ser Ser Ile Gln Phe Ser Phe Lys Glu Lys Leu Ser Glu Lys Val  
 180 185 190  
 Ser Glu Lys Glu Thr Ile Val Lys Glu Ser Gly Lys Gln Pro Gly Ala  
 195 200 205  
 Lys Pro Lys Val Lys Leu Ala Arg Lys Lys Asp Asp Asp Lys Lys Lys  
 210 215 220  
 Ser Ser Asn Glu Lys Leu Lys Gln Thr Ser Val Phe Phe Ser Asp Gly

```

225          230          235          240
Leu Asp Leu Glu Asn Trp Tyr Ser Cys Gly Glu Gly Asp Ile Ser Glu
          245          250          255
Ile Glu Ser Asp Met Gly Ser Pro Gly Ser Arg Lys Ser Pro Asn Phe
          260          265          270
Asn Ile His Pro Leu Tyr Gln His Val Leu Leu Tyr Leu Gln Leu Tyr
          275          280          285
Asp Ser Ser Arg Thr Leu Tyr Ala Phe Ser Ala Ile Lys Ala Ile Leu
          290          295          300
Lys Thr Asn Pro Ile Ala Phe Val Asn Ala Ile Ser Thr Thr Ser Val
305          310          315          320
Asn Asn Ala Tyr Thr Pro Gln Leu Ser Leu Leu Gln Asn Leu Leu Ala
          325          330          335
Arg His Arg Ile Ser Val Met Gly Lys Asp Phe Tyr Ser His Ile Pro
          340          345          350
Val Asp Ser Asn His Asn Phe Arg Ser Ser Met Tyr Ile Glu Ile Leu
          355          360          365
Ile Ser Leu Cys Leu Tyr Tyr Met Arg Ser His Tyr Pro Thr His Val
          370          375          380
Lys Val Thr Ala Gln Asp Leu Ile Gly Asn Arg Asn Met Gln Met Met
385          390          395          400
Ser Ile Glu Ile Leu Thr Leu Leu Phe Thr Glu Leu Ala Lys Val Ile
          405          410          415
Glu Ser Ser Ala Lys Gly Phe Pro Ser Phe Ile Ser Asp Met Leu Ser
          420          425          430
Lys Cys Lys Val Gln Lys Val Ile Leu His Cys Leu Leu Ser Ser Ile
          435          440          445
Phe Ser Ala Gln Lys Trp His Ser Glu Lys Met Ala Gly Lys Asn Leu
          450          455          460
Val Ala Val Glu Glu Gly Phe Ser Glu Asp Ser Leu Ile Asn Phe Ser
465          470          475          480
Glu Asp Glu Phe Asp Asn Gly Ser Thr Leu Gln Ser Gln Leu Leu Lys
          485          490          495
Val Leu Gln Arg Leu Ile Val Leu Glu His Arg Val Met Thr Ile Pro
          500          505          510
Glu Glu Asn Glu Thr Gly Phe Asp Phe Val Val Ser Asp Leu Glu His
          515          520          525
Ile Ser Pro His Gln Pro Met Thr Ser Leu Gln Tyr Leu His Ala Gln
          530          535          540
Pro Ile Thr Cys Gln Gly Met Phe Leu Cys Ala Val Ile Arg Ala Leu
545          550          555          560
His Gln His Cys Ala Cys Lys Met His Pro Gln Trp Ile Gly Leu Ile
          565          570          575
Thr Ser Thr Leu Pro Tyr Met Gly Lys Val Leu Gln Arg Val Val Val
          580          585          590
Ser Val Thr Leu Gln Leu Cys Arg Asn Leu Asp Asn Leu Ile Gln Gln
          595          600          605
Tyr Lys Tyr Glu Thr Gly Leu Ser Asp Ser Arg Pro Leu Trp Met Ala
          610          615          620
Ser Ile Ile Pro Pro Asp Met Ile Leu Thr Leu Leu Glu Gly Ile Thr
625          630          635          640
Ala Ile Ile His Tyr Cys Leu Leu Asp Pro Thr Thr Gln Tyr His Gln
          645          650          655
Leu Leu Val Ser Val Asp Gln Lys His Leu Phe Glu Ala Arg Ser Gly

```

	660						665						670					
Ile	Leu	Ser	Ile	Leu	His	Met	Ile	Met	Ser	Ser	Val	Thr	Leu	Leu	Trp			
	675						680						685					
Ser	Ile	Leu	His	Gln	Ala	Asp	Ser	Ser	Glu	Lys	Met	Thr	Ile	Ala	Ala			
	690						695						700					
Ser	Ala	Ser	Leu	Thr	Thr	Ile	Asn	Leu	Gly	Ala	Thr	Lys	Asn	Leu	Arg			
705	710						715						720					
Gln	Gln	Ile	Leu	Glu	Leu	Leu	Gly	Pro	Ile	Ser	Met	Asn	His	Gly	Val			
	725						730						735					
His	Phe	Met	Ala	Ala	Ile	Ala	Phe	Val	Trp	Asn	Glu	Arg	Arg	Gln	Asn			
	740						745						750					
Lys	Thr	Thr	Thr	Arg	Thr	Lys	Val	Ile	Pro	Ala	Ala	Ser	Glu	Glu	Gln			
	755						760						765					
Leu	Leu	Leu	Val	Glu	Leu	Val	Arg	Ser	Ile	Ser	Val	Met	Arg	Ala	Glu			
	770						775						780					
Thr	Val	Ile	Gln	Thr	Val	Lys	Glu	Val	Leu	Lys	Gln	Pro	Pro	Ala	Ile			
785	790						795						800					
Ala	Lys	Asp	Lys	Lys	His	Leu	Ser	Leu	Glu	Val	Cys	Met	Leu	Gln	Phe			
	805						810						815					
Phe	Tyr	Ala	Tyr	Ile	Gln	Arg	Ile	Pro	Val	Pro	Asn	Leu	Val	Asp	Ser			
	820						825						830					
Trp	Ala	Ser	Leu	Leu	Ile	Leu	Leu	Lys	Asp	Ser	Ile	Gln	Leu	Ser	Leu			
	835						840						845					
Pro	Ala	Pro	Gly	Gln	Phe	Leu	Ile	Leu	Gly	Val	Leu	Asn	Glu	Phe	Ile			
	850						855						860					
Met	Lys	Asn	Pro	Ser	Leu	Glu	Asn	Lys	Lys	Asp	Gln	Arg	Asp	Leu	Gln			
865	870						875						880					
Asp	Val	Thr	His	Lys	Ile	Val	Asp	Ala	Ile	Gly	Ala	Ile	Ala	Gly	Ser			
	885						890						895					
Ser	Leu	Glu	Gln	Thr	Thr	Trp	Leu	Arg	Arg	Asn	Leu	Glu	Val	Lys	Pro			
	900						905						910					
Ser	Pro	Lys	Ile	Met	Val	Asp	Gly	Thr	Asn	Leu	Glu	Ser	Asp	Val	Glu			
	915						920						925					
Asp	Met	Leu	Ser	Pro	Ala	Met	Glu	Thr	Ala	Asn	Ile	Thr	Pro	Ser	Val			
	930						935						940					
Tyr	Ser	Val	His	Ala	Leu	Thr	Leu	Leu	Ser	Glu	Val	Leu	Ala	His	Leu			
945	950						955						960					
Leu	Asp	Met	Val	Phe	Tyr	Ser	Asp	Glu	Lys	Glu	Arg	Val	Ile	Pro	Leu			
	965						970						975					
Leu	Val	Asn	Ile	Met	His	Tyr	Val	Val	Pro	Tyr	Leu	Arg	Asn	His	Ser			
	980						985						990					
Ala	His	Asn	Ala	Pro	Ser	Tyr	Arg	Ala	Cys	Val	Gln	Leu	Leu	Ser	Ser			
	995						1000						1005					
Leu	Ser	Gly	Tyr	Gln	Tyr	Thr	Arg	Arg	Ala	Trp	Lys	Lys	Glu	Ala	Phe			
	1010						1015						1020					
Asp	Leu	Phe	Met	Asp	Pro	Ser	Phe	Phe	Gln	Met	Asp	Ala	Ser	Cys	Val			
1025	1030						1035						1040					
Asn	His	Trp	Arg	Ala	Ile	Met	Asp	Asn	Leu	Met	Thr	His	Asp	Lys	Thr			
	1045						1050						1055					
Thr	Phe	Arg	Asp	Leu	Met	Thr	Arg	Val	Ala	Val	Ala	Gln	Ser	Ser	Ser			
	1060						1065						1070					
Leu	Asn	Leu	Phe	Ala	Asn	Arg	Asp	Val	Glu	Leu	Glu	Gln	Arg	Ala	Met			
	1075						1080						1085					
Leu	Leu	Lys	Arg	Leu	Ala	Phe	Ala	Ile	Phe	Ser	Ser	Glu	Ile	Asp	Gln			

1090 1095 1100  
 Tyr Gln Lys Tyr Leu Pro Asp Ile Gln Glu Arg Leu Val Glu Ser Leu  
 1105 1110 1115 1120  
 Arg Leu Pro Gln Val Pro Thr Leu His Ser Gln Val Phe Leu Phe Phe  
 1125 1130 1135  
 Arg Val Leu Leu Leu Arg Met Ser Pro Gln His Leu Thr Ser Leu Trp  
 1140 1145 1150  
 Pro Thr Met Ile Thr Glu Leu Val Gln Val Phe Leu Leu Met Glu Gln  
 1155 1160 1165  
 Glu Leu Thr Ala Asp Glu Asp Ile Ser Arg Thr Ser Gly Pro Ser Val  
 1170 1175 1180  
 Ala Gly Leu Glu Thr Thr Tyr Thr Gly Gly Asn Gly Phe Ser Thr Ser  
 1185 1190 1195 1200  
 Tyr Asn Ser Gln Arg Trp Leu Asn Leu Tyr Leu Ser Ala Cys Lys Phe  
 1205 1210 1215  
 Leu Asp Leu Ala Leu Ala Leu Pro Ser Glu Asn Leu Pro Gln Phe Gln  
 1220 1225 1230  
 Met Tyr Arg Trp Ala Phe Ile Pro Glu Ala Ser Asp Asp Ser Gly Leu  
 1235 1240 1245  
 Glu Val Arg Arg Gln Gly Ile His Gln Arg Glu Phe Lys Pro Tyr Val  
 1250 1255 1260  
 Val Arg Leu Ala Lys Leu Leu Arg Lys Arg Ala Lys Lys Asn Pro Glu  
 1265 1270 1275 1280  
 Glu Asp Asn Ser Gly Arg Thr Leu Gly Trp Glu Pro Gly His Leu Leu  
 1285 1290 1295  
 Leu Thr Ile Cys Thr Val Arg Ser Met Glu Gln Leu Leu Pro Phe Phe  
 1300 1305 1310  
 Asn Val Leu Ser Gln Val Phe Asn Ser Lys Val Thr Ser Arg Cys Gly  
 1315 1320 1325  
 Gly His Ser Gly Ser Pro Ile Leu Tyr Ser Asn Ala Phe Pro Asn Lys  
 1330 1335 1340  
 Asp Met Lys Leu Glu Asn His Lys Pro Cys Ser Ser Lys Ala Arg Gln  
 1345 1350 1355 1360  
 Lys Ile Glu Glu Met Val Glu Lys Asp Phe Leu Glu Gly Met Ile Lys  
 1365 1370 1375  
 Thr

<210> 1831  
 <211> 508  
 <212> DNA  
 <213> Homo sapiens

<400> 1831  
 nntcatgaaa ggagaggccg tatgccatt gtcaaactca gtgcgcagtt cgtgcgcgaa  
 60  
 gcggtttgcc cgcccgaaa atccaagggtg gactattacg acaacgcact caaagggttc  
 120  
 atcctggagg ctgcaccttc aggtggcaaa accttttacc tgcgctatca cgacagccac  
 180  
 ggcaagctgc gccaatgcaa gatcggtgat gctgctgcgg tcagctacga caaggcccg  
 240  
 cagaaggcca tgcggttcg ttggaagggtg gaatgggggg gcaatccatt ggaggagcgc  
 300

caagccttgc gtgcggtacc gaccctggcc gagttcatcc gcgagaccta tgtgccgcac  
 360  
 atccacctgc accggaggaa ttttcagtec acgctgagct tcctcaagtg ccatgtcctg  
 420  
 ccgcgctttg gagccaagca cctggacgaa atcacgacca acatgctggc cgaggtcac  
 480  
 caggatctgc gcacgaaggg ctacgcgt  
 508

<210> 1832

<211> 169

<212> PRT

<213> Homo sapiens

<400> 1832

Xaa	His	Glu	Arg	Arg	Gly	Arg	Met	Pro	Ile	Val	Lys	Leu	Ser	Ala	Gln
1				5					10					15	
Phe	Val	Arg	Glu	Ala	Val	Cys	Pro	Pro	Gly	Lys	Ser	Lys	Val	Asp	Tyr
			20					25					30		
Tyr	Asp	Asn	Ala	Leu	Lys	Gly	Phe	Ile	Leu	Glu	Ala	Arg	Pro	Ser	Gly
		35				40						45			
Gly	Lys	Thr	Phe	Tyr	Leu	Arg	Tyr	His	Asp	Ser	His	Gly	Lys	Leu	Arg
	50					55					60				
Gln	Cys	Lys	Ile	Gly	Asp	Ala	Ala	Val	Ser	Tyr	Asp	Lys	Ala	Arg	
65					70				75					80	
Gln	Lys	Ala	Met	Arg	Leu	Arg	Trp	Lys	Val	Glu	Trp	Gly	Gly	Asn	Pro
			85						90					95	
Leu	Glu	Glu	Arg	Gln	Ala	Leu	Arg	Ala	Val	Pro	Thr	Leu	Ala	Glu	Phe
			100					105					110		
Ile	Arg	Glu	Thr	Tyr	Val	Pro	His	Ile	His	Leu	His	Arg	Arg	Asn	Phe
	115						120					125			
Gln	Ser	Thr	Leu	Ser	Phe	Leu	Lys	Cys	His	Val	Leu	Pro	Arg	Phe	Gly
	130				135						140				
Ala	Lys	His	Leu	Asp	Glu	Ile	Thr	Thr	Asn	Met	Leu	Ala	Glu	Ala	His
145				150					155						160
Gln	Asp	Leu	Arg	Thr	Lys	Gly	Tyr	Ala							
					165										

<210> 1833

<211> 430

<212> DNA

<213> Homo sapiens

<400> 1833

acgcgtgcga tgttgaagga gcgcttcggc atcgggcatg cgacgctgca gggtgaactg  
 60  
 tccgggtgccg aggcagacga tgccgaggcg ggcggctgct aagggtcgcc gtcgttcagt  
 120  
 ggcgcaaagc ggcgatgatc gcgtcgaaca gcgttactcc agccagcggg ccaaccaaca  
 180  
 gcatcaccag gttgaaaccg atgatccacg ccgcgatgct ttctcggcgc gggtttggca  
 240  
 gcggcttggg ctccgcttcc cagcgttccg gcggcgccca gccattttgg aaatcgacga  
 300

acatctccgg cgctcctgct gtcaggcgct gaaggatcg aaagtcatgc gccgtgacaa  
 360  
 aggaagatcg gcgacacagg agccgaagcg ccgccgcctg caataagcgc gcgcgatcgc  
 420  
 aattgtcggn  
 430

<210> 1834  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 1834  
 Met Arg Arg Cys Arg Leu Asn Cys Pro Val Pro Arg Gln Thr Met Pro  
 1 5 10 15  
 Arg Arg Ala Ala Lys Gly Arg Arg Arg Ser Val Ala Gln Ser Gly  
 20 25 30  
 Asp Asp Arg Val Glu Gln Arg Tyr Ser Ser Gln Arg Ala Asn Gln Gln  
 35 40 45  
 His His Gln Val Glu Thr Asp Asp Pro Arg Arg Asp Ala Phe Ser Ala  
 50 55 60  
 Arg Val Trp Gln Arg Leu Gly Phe Pro Ala Phe Arg Arg Arg  
 65 70 75 80  
 Pro Ala Ile Leu Glu Ile Asp Glu His Leu Arg Arg Ser Cys Cys Gln  
 85 90 95  
 Ala Leu Lys Val Ser Lys Val Met Arg Arg Asp Lys Gly Arg Ser Ala  
 100 105 110  
 Thr Gln Glu Pro Lys Arg Arg Arg Leu Gln  
 115 120

<210> 1835  
 <211> 677  
 <212> DNA  
 <213> Homo sapiens

<400> 1835  
 natactcaag gactttgacg gcacccgagc ccggttgctc cctgaggcca tcatgaaccc  
 60  
 cccagtggca ccctatgeta ctgtggcacc cagcacttta gcccaccccc aggcccaggc  
 120  
 tctggccccg cagcaggccc tgcagcatgc acagaccctg gcccatgccc ctccccagac  
 180  
 gctgcagcac cctcagggtta tcccgccacc ccaggcactg tcccaccctc agagcctcca  
 240  
 gcagcctcag ggcttggggc accctcagcc catggcccaa acccagggtt tggtcacccc  
 300  
 tcaggccctg gctcaccagg gtctccagca cccccacaat cccttgctgc atggaggccg  
 360  
 gaagatgcca gactcagatg cccccccgaa tgtgaccgtg tctacctcaa ctatccccct  
 420  
 ttcaatggcg gccactctgc agcacagcca gcctccggac ctgagtagca tcgtgcacca  
 480  
 gatcaaccag ttttgccaga cgagggcagg catcagcact acctcagtgt gtgagggccca  
 540



gacgcgaac cccagcccca ttagtcgcag tctgtctatc aatgcaagca cccgggtgtc  
 600  
 gacccacagc gtccccacac caatgccttc atgtgtgggc aatcccatgg agcacacca  
 660  
 cgcgccacc gccgcgg  
 677

<210> 1836  
 <211> 140  
 <212> PRT  
 <213> Homo sapiens

<400> 1836  
 Gly His His Glu Pro Pro Ser Gly Thr Leu Cys Tyr Cys Gly Thr Gln  
 1 5 10 15  
 His Phe Ser Pro Pro Pro Gly Pro Gly Ser Gly Pro Pro Ala Gly Pro  
 20 25 30  
 Ala Ala Cys Thr Asp Pro Gly Pro Cys Pro Ser Pro Asp Ala Ala Ala  
 35 40 45  
 Pro Ser Gly Tyr Pro Ala Thr Pro Gly Thr Val Pro Pro Ser Glu Pro  
 50 55 60  
 Pro Ala Ala Ser Gly Pro Gly Pro Pro Ser Ala His Gly Pro Asn Pro  
 65 70 75 80  
 Gly Leu Gly Pro Pro Ser Gly Pro Gly Ser Pro Gly Ser Pro Ala Pro  
 85 90 95  
 Pro Gln Ser Leu Ala Ala Trp Arg Pro Glu Asp Ala Arg Leu Arg Cys  
 100 105 110  
 Pro Pro Glu Cys Asp Arg Val Tyr Leu Asn Tyr Pro Pro Phe Asn Gly  
 115 120 125  
 Gly His Ser Ala Ala Gln Pro Ala Ser Gly Pro Glu  
 130 135 140

<210> 1837  
 <211> 564  
 <212> DNA  
 <213> Homo sapiens

<400> 1837  
 nntctagaac actctgcccc tgaatctgta cggggtattgt ttggcccgtc acgaactcgt  
 60  
 acggtcgata tcaatatcac tgggttttct tcacagtatt taccgcgcc ctatggacca  
 120  
 attgctgcgg acgtcaaaca aacctgggcg tgggaccac aggatctgac gattgtctca  
 180  
 acttctgctg atcacgacca taacctccga tatgcagtac agcatttcgg cgcaagcccg  
 240  
 accccgatcc agtaaccttc gataacgga aagccggcac cccacataac tcgngtgtac  
 300  
 accgaagtcc ctgccaacgt tccatccgac ataggggagt taactaaccg aattatcaag  
 360  
 gggaaatcta cccccgtaac caaggccatc gcgattcaaa actggcttcg tgacagcgct  
 420  
 cgattccatt acgacatcaa cgcaccgaa ggtgacggct atcaggtact ggaaaacttc  
 480

ctgctgcaca cccaccgagg ttattgcac catttcgagg cgtcaatggc actcatggca  
 540  
 cgacttgaag gtattccgac acgc  
 564

<210> 1838  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

<400> 1838  
 Xaa Leu Glu His Ser Ala Pro Glu Ser Val Pro Gly Leu Phe Gly Pro  
 1 5 10 15  
 Ser Arg Thr Arg Thr Val Asp Ile Asn Ile Thr Gly Phe Ser Ser Gln  
 20 25 30  
 Tyr Leu Pro Ala Pro Tyr Gly Pro Ile Ala Ala Asp Val Lys Gln Thr  
 35 40 45  
 Trp Ala Trp Asp Pro Gln Asp Leu Thr Ile Val Ser Thr Ser Ala Asp  
 50 55 60  
 His Asp His Asn Leu Arg Tyr Ala Val Gln His Phe Gly Ala Ser Pro  
 65 70 75 80  
 Thr Pro Ile Gln

<210> 1839  
 <211> 300  
 <212> DNA  
 <213> Homo sapiens

<400> 1839  
 ncaatacaggc tgaacaccgc tgatatacc cgtactttcc ccgtcaacgg aaaattttcc  
 60  
 gaagttcagg caaaggctta tcaggcgggtg ctggacgctg cagatgcggc atttaaggca  
 120  
 gccgttcttg gcaataaatt ccgcgacgac catgctgcag cgatgaatgt tctgcctcc  
 180  
 cgccttgagg actgggggct tatgccgggc agcgcgaagg tcgctctttc ggacgagggc  
 240  
 gggcaacacc gtcgttggat gccgcacggc accagccacc atctagggtt ggatgtgcac  
 300

<210> 1840  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 1840  
 Xaa Ile Arg Leu Asn Thr Ala Asp Ile Thr Arg Thr Phe Pro Val Asn  
 1 5 10 15  
 Gly Lys Phe Ser Glu Val Gln Ala Lys Ala Tyr Gln Ala Val Leu Asp  
 20 25 30  
 Ala Ala Asp Ala Ala Phe Lys Ala Ala Val Pro Gly Asn Lys Phe Arg  
 35 40 45  
 Asp Val His Ala Ala Ala Met Asn Val Leu Ala Ser Arg Leu Glu Asp

```

      50              55              60
Trp Gly Leu Met Pro Val Ser Ala Lys Val Ala Leu Ser Asp Glu Gly
65              70              75              80
Gly Gln His Arg Arg Trp Met Pro His Gly Thr Ser His His Leu Gly
      85              90              95
Leu Asp Val His
      100

```

<210> 1841  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1841
nnctccaaga acgtccccga gtggggcccc agggcgctcg aactccccgg cgggccccgt
60
gtcgatccgg tggtcgagat cggcgggtccc ggtacgctag cccaatcgat ggtcgccccg
120
cgcgtcggcg cccatgtcgc cttgatcggc gtgcttnacg gggattgtcg ggcggtgagg
180
acggcgctgc tgatgagcaa gaatctgcgc gtgcaagggc tgccgggtcgg cagccgcgcg
240
cagcaactcg cgatgatcgc ggggggtcgag gcgaacggca tccgtccgat cctcgaccag
300
catttccgcg tcgaaaaatct ccccgacgcg
330

```

<210> 1842  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1842
Xaa Ser Lys Asn Val Pro Glu Trp Gly Pro Arg Ala Leu Glu Leu Pro
1              5              10              15
Gly Gly Pro Gly Val Asp Pro Val Val Glu Ile Gly Gly Pro Gly Thr
      20              25              30
Leu Ala Gln Ser Met Val Ala Pro Arg Val Gly Ala His Val Ala Leu
      35              40              45
Ile Gly Val Leu Xaa Gly Asp Cys Arg Ala Val Arg Thr Ala Leu Leu
      50              55              60
Met Ser Lys Asn Leu Arg Val Gln Gly Leu Pro Val Gly Ser Arg Ala
65              70              75              80
Gln Gln Leu Ala Met Ile Ala Gly Val Glu Ala Asn Gly Ile Arg Pro
      85              90              95
Ile Leu Asp Gln His Phe Pro Leu Glu Asn Leu Pro Asp Ala
      100              105              110

```

<210> 1843  
 <211> 473  
 <212> DNA  
 <213> Homo sapiens

<400> 1843

aagctttggc atctccagca aaagatgtgc tatttactga taccatcacc atgaaggcca  
 60  
 acagttttga gtccagatta acaccaagca ggttcacgaa agccttaagt tatgcatcat  
 120  
 tagataaaga agatttattg agtcctatta atcaaaatac cctgcaacga tcttcctcag  
 180  
 tgcggtccat ggtgtccagt gccacatatg ggggttcaga tgattacatt ggtcttgctc  
 240  
 tcccgggtgga tataaatgat atattccagg taaaggatat tccctatttt cagacaaaaa  
 300  
 acataccacc acatgatgat cgagggtgcaa gagcatttgc ccatgatgca ggaggctctc  
 360  
 catctggaac tggaggctctt gtaaaaaatt cttttcactt gctacgacag cagatgagtc  
 420  
 ttacggaaat aatgaattca atccattcag atgcctctcn cnnccnccccc ccc  
 473

<210> 1844

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1844

Met	Lys	Ala	Asn	Ser	Phe	Glu	Ser	Arg	Leu	Thr	Pro	Ser	Arg	Phe	Met
1				5					10					15	
Lys	Ala	Leu	Ser	Tyr	Ala	Ser	Leu	Asp	Lys	Glu	Asp	Leu	Leu	Ser	Pro
			20					25					30		
Ile	Asn	Gln	Asn	Thr	Leu	Gln	Arg	Ser	Ser	Val	Arg	Ser	Met	Val	
		35				40					45				
Ser	Ser	Ala	Thr	Tyr	Gly	Gly	Ser	Asp	Asp	Tyr	Ile	Gly	Leu	Ala	Leu
	50					55				60					
Pro	Val	Asp	Ile	Asn	Asp	Ile	Phe	Gln	Val	Lys	Asp	Ile	Pro	Tyr	Phe
65				70					75					80	
Gln	Thr	Lys	Asn	Ile	Pro	Pro	His	Asp	Asp	Arg	Gly	Ala	Arg	Ala	Phe
			85					90					95		
Ala	His	Asp	Ala	Gly	Gly	Leu	Pro	Ser	Gly	Thr	Gly	Gly	Leu	Val	Lys
			100				105						110		
Asn	Ser	Phe	His	Leu	Leu	Arg	Gln	Met	Ser	Leu	Thr	Glu	Ile	Met	
		115				120					125				
Asn	Ser	Ile	His	Ser	Asp	Ala	Ser	Xaa	Xaa	Xaa	Xaa	Pro			
	130					135					140				

<210> 1845

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1845

aagcttacga cgcttagctt tggagacctg aaccacttga tcagtgcac aatgagtgga  
 60  
 gtgacttgct gcctccgctt cccggggcag ctcaactcgg accttcggaa acttgacgtg  
 120  
 aacctgattc cattccctcg cctgcacttt tttatggctg gctttgcgcc actcacctcg  
 180

cgtaggtccc agcagtaccg tgctctcact gtccctgagc tgaccagca gatgtgggac  
 240  
 tccaagaaca tgatgtgtgc tgctgacccg cgtcatggcc gctacctcac agtatctgcc  
 300  
 atgttccgtg gaaagatgag caccaaggag gtggacgagc agatgctgaa cgtgcagaac  
 360  
 aagaactctt cctacttcgt ggagtggatc  
 390

<210> 1846

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1846

Lys	Leu	Thr	Thr	Pro	Ser	Phe	Gly	Asp	Leu	Asn	His	Leu	Ile	Ser	Ala
1				5					10					15	
Thr	Met	Ser	Gly	Val	Thr	Cys	Cys	Leu	Arg	Phe	Pro	Gly	Gln	Leu	Asn
			20					25					30		
Ser	Asp	Leu	Arg	Lys	Leu	Ala	Val	Asn	Leu	Ile	Pro	Phe	Pro	Arg	Leu
		35				40					45				
His	Phe	Phe	Met	Val	Gly	Phe	Ala	Pro	Leu	Thr	Ser	Arg	Gly	Ser	Gln
	50					55					60				
Gln	Tyr	Arg	Ala	Leu	Thr	Val	Pro	Glu	Leu	Thr	Gln	Gln	Met	Trp	Asp
65				70					75					80	
Ser	Lys	Asn	Met	Met	Cys	Ala	Ala	Asp	Pro	Arg	His	Gly	Arg	Tyr	Leu
			85					90					95		
Thr	Val	Ser	Ala	Met	Phe	Arg	Gly	Lys	Met	Ser	Thr	Lys	Glu	Val	Asp
			100					105					110		
Glu	Gln	Met	Leu	Asn	Val	Gln	Asn	Lys	Asn	Ser	Ser	Tyr	Phe	Val	Glu
		115					120					125			
Trp	Ile														
	130														

<210> 1847

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1847

cagccgtgct ttctgcgctc aactcgggaa cggctatata gcgcagatcc aacagttcca  
 60  
 tggctcgaag agtagtaaaa atatcaataa ctggcagagc atcgcgtcaa gctggcgacc  
 120  
 ctggccgccc ccgcgttgcc cgatcacgcc atgttgagc aggccttcca gctgttccag  
 180  
 caaaaaagt gcgacaatc tctgcgga tggctcgggtg ttcgacttca gggagcgcca  
 240  
 tgcactgcac tacgtcgtct atgacctgga gccgctgggt caggcgcccc tggcgggcaa  
 300  
 gccctaaccg tggcaactgg ctgacttaca ccgccccac cgn  
 343

<210> 1848

<211> 94  
 <212> PRT  
 <213> Homo sapiens

<400> 1848  
 Met Ala Arg Arg Val Val Lys Ile Ser Ile Thr Gly Arg Ala Ser Arg  
 1 5 10 15  
 Gln Ala Gly Asp Pro Gly Arg Arg Arg Val Gly Arg Ser Arg His Val  
 20 25 30  
 Gly Ala Gly Leu Pro Ala Val Pro Ala Lys Lys Leu Arg Thr Ile Ser  
 35 40 45  
 Cys Arg Met Ala Arg Cys Ser Thr Ser Gly Ser Ala Met His Cys Thr  
 50 55 60  
 Thr Ser Ser Met Thr Trp Ser Arg Trp Phe Arg Arg Pro Trp Arg Ala  
 65 70 75 80  
 Ser Pro Asn Gly Gly Asn Trp Leu Thr Tyr Thr Ala Pro Thr  
 85 90

<210> 1849  
 <211> 390  
 <212> DNA  
 <213> Homo sapiens

<400> 1849  
 cggaaagaac aggttcagca aagagcaata gaatgttccc gggctctcag tgcgattctt  
 60  
 gacattgaac atggagaccc aaaagagaat gtactaggtt cagcttttga catgaaacag  
 120  
 ctgaaggatg ctattgatga gactaaaata gctttgatgg gacattcttt tggaggagca  
 180  
 acagttcttc aagcccttag tgaggaccag agattcagat gtggagttgc tcttgatcca  
 240  
 tggatgtatc cggatgaacga agagctgtac tccagaaccc tccagcctct cctctttatc  
 300  
 aactctgcca aattccagac tccaaaggac atcgcaaaaa tgaaaaagtt ctaccagcct  
 360  
 gacaaggaaa ggaaanatga ttacaatcaa  
 390

<210> 1850  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 1850  
 Arg Lys Glu Gln Val Gln Gln Arg Ala Ile Glu Cys Ser Arg Ala Leu  
 1 5 10 15  
 Ser Ala Ile Leu Asp Ile Glu His Gly Asp Pro Lys Glu Asn Val Leu  
 20 25 30  
 Gly Ser Ala Phe Asp Met Lys Gln Leu Lys Asp Ala Ile Asp Glu Thr  
 35 40 45  
 Lys Ile Ala Leu Met Gly His Ser Phe Gly Gly Ala Thr Val Leu Gln  
 50 55 60  
 Ala Leu Ser Glu Asp Gln Arg Phe Arg Cys Gly Val Ala Leu Asp Pro

```

65          70          75          80
Trp Met Tyr Pro Val Asn Glu Glu Leu Tyr Ser Arg Thr Leu Gln Pro
          85          90          95
Leu Leu Phe Ile Asn Ser Ala Lys Phe Gln Thr Pro Lys Asp Ile Ala
          100          105          110
Lys Met Lys Lys Phe Tyr Gln Pro Asp Lys Glu Arg Lys Xaa Asp Tyr
          115          120          125
Asn Gln
          130

```

<210> 1851  
 <211> 574  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1851
ncgatcggag aggcctttccg cactgggtgac ttggactcta agcccgaccc cagccggagc
60
ttcaggcctt accgagctga agacaatgat tcctatgcct ctgagatcaa ggagctgcag
120
ctggtgctgg ctgaggccca cgacagcctc cggggcttgc aagagcagct ctcccaggag
180
cggcagctac gaaaggagga ggccgacaat ttcaaccaga aaatgggtcca gctgaaggag
240
gaccagcaga gggcgctcct gaggcgggag tttgagctgc agagtctgag cctccagcgg
300
aggtctggagc agaaattctg gagccaggag aagaacatgc tgggtgcagga gtcccagcaa
360
ttcaagcaca acttcctgct gctcttcctg aagctcaggt ggttctctaa gcgctggcgg
420
cagggcaagg ttttgcctcag cgaaggggat gacttcctcg aggtgaacag catgaaggac
480
ctgtacttgc tgatggagga agacgagata aacgctcagc attctgataa caaggcctgc
540
acgggggaca gctggaccca gaacacgccc aatg
574

```

<210> 1852  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1852
Xaa Ile Gly Glu Ala Phe Arg Thr Gly Asp Leu Asp Ser Lys Pro Asp
1          5          10          15
Pro Ser Arg Ser Phe Arg Pro Tyr Arg Ala Glu Asp Asn Asp Ser Tyr
          20          25          30
Ala Ser Glu Ile Lys Glu Leu Gln Leu Val Leu Ala Glu Ala His Asp
          35          40          45
Ser Leu Arg Gly Leu Gln Glu Leu Ser Gln Glu Arg Gln Leu Arg
          50          55          60
Lys Glu Glu Ala Asp Asn Phe Asn Gln Lys Met Val Gln Leu Lys Glu
65          70          75          80
Asp Gln Gln Arg Ala Leu Leu Arg Arg Glu Phe Glu Leu Gln Ser Leu

```

				85						90					95				
Ser	Leu	Gln	Arg	Arg	Leu	Glu	Gln	Lys	Phe	Trp	Ser	Gln	Glu	Lys	Asn				
			100					105					110						
Met	Leu	Val	Gln	Glu	Ser	Gln	Gln	Phe	Lys	His	Asn	Phe	Leu	Leu	Leu				
		115					120					125							
Phe	Met	Lys	Leu	Arg	Trp	Phe	Leu	Lys	Arg	Trp	Arg	Gln	Gly	Lys	Val				
	130					135					140								
Leu	Pro	Ser	Glu	Gly	Asp	Asp	Phe	Leu	Glu	Val	Asn	Ser	Met	Lys	Asp				
145					150					155					160				
Leu	Tyr	Leu	Leu	Met	Glu	Glu	Asp	Glu	Ile	Asn	Ala	Gln	His	Ser	Asp				
			165					170						175					
Asn	Lys	Ala	Cys	Thr	Gly	Asp	Ser	Trp	Thr	Gln	Asn	Thr	Pro	Asn					
		180						185					190						

&lt;210&gt; 1853

&lt;211&gt; 338

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1853

```

gccggcgccg accaagccac ggcattgcccc accacattg gaagaggtgt cgttcgcgca
60
cgctcattgag gagcgcgccg tcgaagctga cttgttcgtc cgctcgctca atacactcga
120
gcctgcgacg ggcattggcacc ttctgcgcat ctgcgaccac atggatggca aggtcggcac
180
gacgtttttac ctggatgacg atgtcatttt tgctgcgcca cagaagcagc gctcagccga
240
gggccagcga ctgaatacag agcccgtctc ttggccgag ttgctcgagc gcgctgctgc
300
atagaatata tatacccaag ctatgatgat gccgtcgt
338

```

&lt;210&gt; 1854

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1854

Met	Pro	His	Pro	Pro	Trp	Lys	Arg	Cys	Arg	Ser	Ala	Thr	Ser	Leu	Arg				
1				5					10					15					
Ser	Ala	Pro	Ser	Lys	Leu	Thr	Cys	Ser	Ser	Ala	Arg	Ser	Ile	His	Ser				
		20					25						30						
Ser	Leu	Arg	Arg	Ala	Trp	His	Phe	Cys	Ala	Ser	Arg	Thr	Thr	Trp	Met				
	35					40						45							
Ala	Arg	Ser	Ala	Arg	Arg	Phe	Thr	Trp	Met	Thr	Met	Ser	Phe	Leu	Ser				
	50				55					60									
Arg	His	Arg	Ser	Ser	Ala	Gln	Pro	Arg	Ala	Ser	Asp	Ser	Asn	Thr	Ser				
65				70					75					80					
Pro	Ser	Leu	Trp	Pro	Ser	Cys	Ser	Ser	Ala	Leu	Leu	His	Arg	Ile	His				
			85					90						95					
Ile	Pro	Lys	Leu																
		100																	



<210> 1855  
 <211> 429  
 <212> DNA  
 <213> Homo sapiens

<400> 1855  
 gcgtccttcg cgtacgtgga cgagggcggg caggtgttcg tccagtgcag caccagcac  
 60  
 ccgagcgaaa cgcaggaaat cgtggcgcac gtcctggacc tggacaacca cgaggtcacg  
 120  
 gtgcagtgtc tgcgcattgg cgtgggcttt ggcggtaagg aaatgcagcc gcacgggttc  
 180  
 gccgcgatcg cagcactcgg cgcgacctg accgggcgac cggttcgact gcgactgacc  
 240  
 cgaaaccagg acatcaccat ctccgaaaag cgccacccat acctcgcgga gtgggacgtg  
 300  
 gccttcgacg acgacggccg cctccaggct ctgcgcgcca ccgtcaccag cgacggcggg  
 360  
 tggagcctgg acctctcgga gccggtgatg cagcggacgg tgtgtcacat cgataactcc  
 420  
 tattggatc  
 429

<210> 1856  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 1856  
 Ala Ser Phe Ala Tyr Val Asp Glu Gly Gly Gln Val Phe Val Gln Cys  
 1 5 10 15  
 Ser Thr Gln His Pro Ser Glu Thr Gln Glu Ile Val Ala His Val Leu  
 20 25 30  
 Asp Leu Asp Asn His Glu Val Thr Val Gln Cys Leu Arg Met Gly Gly  
 35 40 45  
 Gly Phe Gly Gly Lys Glu Met Gln Pro His Gly Phe Ala Ala Ile Ala  
 50 55 60  
 Ala Leu Gly Ala Thr Leu Thr Gly Arg Pro Val Arg Leu Arg Leu Thr  
 65 70 75 80  
 Arg Asn Gln Asp Ile Thr Ile Ser Gly Lys Arg His Pro Tyr Leu Ala  
 85 90 95  
 Glu Trp Asp Val Ala Phe Asp Asp Asp Gly Arg Leu Gln Ala Leu Arg  
 100 105 110  
 Ala Thr Val Thr Ser Asp Gly Gly Trp Ser Leu Asp Leu Ser Glu Pro  
 115 120 125  
 Val Met Gln Arg Thr Val Cys His Ile Asp Asn Ser Tyr Trp Ile  
 130 135 140

<210> 1857  
 <211> 393  
 <212> DNA  
 <213> Homo sapiens

<400> 1857

gtgcacgccg ctgccccagc cgtgcctac cgateaacag acgcagccgc cgtgcgttga  
 60  
 gataccagcc gagcagatc atgctcagca tggtcagcag cagccagaac ggaaatcgca  
 120  
 gcaggcgctc gaacagctca ctgccacca gcaccagcgg gattgccccg gccacgacca  
 180  
 gtgcgccgag gagcagccac catcgccccg tcatgtgcg gcactcgata ccaatacgtt  
 240  
 gcgcttcaac caatcgatct tggtcgaggc atgccgccca tcttccaaca ggcgagtcac  
 300  
 cagactcagc cagtaacacc gcgaaaaatc gtggcgcatg tcgacagggt gcaaaccgag  
 360  
 acgcagcacg ggtgcctgtc ggtggcgggc gag  
 393

&lt;210&gt; 1858

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1858

Met	Leu	Ser	Met	Val	Ser	Ser	Ser	Gln	Asn	Gly	Asn	Arg	Ser	Arg	Arg
1				5					10					15	
Ser	Asn	Ser	Ser	Leu	Pro	Pro	Ser	Thr	Ser	Gly	Ile	Ala	Pro	Ala	Thr
			20					25					30		
Thr	Ser	Ala	Pro	Arg	Ser	Ser	His	His	Arg	Pro	Leu	Met	Leu	Arg	His
		35					40					45			
Ser	Ile	Pro	Ile	Arg	Cys	Ala	Ser	Thr	Asn	Arg	Ser	Trp	Ser	Arg	His
	50					55				60					
Ala	Ala	His	Leu	Pro	Thr	Gly	Glu	Ser	Pro	Asp	Ser	Ala	Ser	Asn	Thr
65					70					75				80	
Ala	Lys	Asn	Arg	Gly	Ala	Cys	Arg	Gln	Gly	Ala	Asn	Arg	Asp	Ala	Ala
			85					90						95	
Arg	Val	Pro	Val	Gly	Gly	Gly	Arg								
															100

&lt;210&gt; 1859

&lt;211&gt; 345

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1859

nagatctggc gcctcgctac caacttcctc tacttccgca agatggattt ggattttctg  
 60  
 ttccacatgt tttttctcgc acgatactgc aagcttctgg aggagaactc atttagagga  
 120  
 agaactgccg acttttttta catgctcttg tttggtgcta ctgtcctaac tagcattggt  
 180  
 ctgatcggag ggatgatacc ttacatttcc gagacatttg ccagaattct gttcctgagc  
 240  
 aattcattga cgtttatgat ggtttatgtc tggagcaagc acaatcctat catccatag  
 300  
 agcaatctgg gcctgttcac ctttacggct gcatacttac catgg  
 345

<210> 1860  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 1860  
 Xaa Ile Trp Arg Leu Val Thr Asn Phe Leu Tyr Phe Arg Lys Met Asp  
 1 5 10 15  
 Leu Asp Phe Leu Phe His Met Phe Phe Leu Ala Arg Tyr Cys Lys Leu  
 20 25 30  
 Leu Glu Glu Asn Ser Phe Arg Gly Arg Thr Ala Asp Phe Phe Tyr Met  
 35 40 45  
 Leu Leu Phe Gly Ala Thr Val Leu Thr Ser Ile Val Leu Ile Gly Gly  
 50 55 60  
 Met Ile Pro Tyr Ile Ser Glu Thr Phe Ala Arg Ile Leu Phe Leu Ser  
 65 70 75 80  
 Asn Ser Leu Thr Phe Met Met Val Tyr Val Trp Ser Lys His Asn Pro  
 85 90 95  
 Ile Ile His Met Ser Asn Leu Gly Leu Phe Thr Phe Thr Ala Ala Tyr  
 100 105 110  
 Leu Pro Trp  
 115

<210> 1861  
 <211> 435  
 <212> DNA  
 <213> Homo sapiens

<400> 1861  
 gcgttgactg tagtgagtga cgaagctgat atacaaaatg cgccgggcgt tagaaaagcc  
 60  
 aatagtgagc ttcattcagt cggcttaggt gttatgaact tacatggcta tcttgctaaa  
 120  
 aacaaaattg gctatgagtc ggaagaagct aaagattttg ctaatatatt ctttatgatg  
 180  
 atgaattact attcacttga aagatcaatg caaatagcaa aagaaagaca ggaaacgttt  
 240  
 aaagactttg ataagtcaga ttatgcaaat ggaaaatatt tcgaatttta tacttcgcaa  
 300  
 tcatttgaac cgaaatacga aaaagtacgt aaattatttg atggttttaga aatcccaacg  
 360  
 cctgaagatt ggaaagcatt gcaaaaagaa gttgaaactc acggttttatt ccatgcttat  
 420  
 cgtttagcga ttgca  
 435

<210> 1862  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<400> 1862  
 Ala Leu Thr Val Val Ser Asp Glu Ala Asp Ile Gln Asn Ala Pro Gly

1                    5                    10                    15  
 Val Arg Lys Ala Asn Ser Glu Leu His Ser Val Gly Leu Gly Val Met  
                   20                    25                    30  
 Asn Leu His Gly Tyr Leu Ala Lys Asn Lys Ile Gly Tyr Glu Ser Glu  
                   35                    40                    45  
 Glu Ala Lys Asp Phe Ala Asn Ile Phe Phe Met Met Met Asn Tyr Tyr  
                   50                    55                    60  
 Ser Leu Glu Arg Ser Met Gln Ile Ala Lys Glu Arg Gln Glu Thr Phe  
 65                    70                    75                    80  
 Lys Asp Phe Asp Lys Ser Asp Tyr Ala Asn Gly Lys Tyr Phe Glu Phe  
                   85                    90                    95  
 Tyr Thr Ser Gln Ser Phe Glu Pro Lys Tyr Glu Lys Val Arg Lys Leu  
                   100                    105                    110  
 Phe Asp Gly Leu Glu Ile Pro Thr Pro Glu Asp Trp Lys Ala Leu Gln  
                   115                    120                    125  
 Lys Glu Val Glu Thr His Gly Leu Phe His Ala Tyr Arg Leu Ala Ile  
                   130                    135                    140  
 Ala  
 145

&lt;210&gt; 1863

&lt;211&gt; 792

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1863

nggatacctca cgccccccat catacgtggg atatacgttga gcaaatacgt catgacgggg  
 60  
 tctccgtcgt gctcactacc cacaacatgg atgaggctca acggctggct gatcacgtct  
 120  
 ggatcgctga tcgcggcagg gtcgcaactc atggaactgt gccagagctc accgctgagt  
 180  
 cgagtttga agatgtgttc ctactcaca ctagtgaccg cgcagcagg aggaattgac  
 240  
 atgacgacac tcgatctcgg ccccgcaact caggccgcac cggctgctgc acgctgctg  
 300  
 aaccacgctc tcaccgaggt gcgtctggtg atgcgcaacg gtgagcagct gctactagct  
 360  
 ctgctcattc ccatcgggat catcgctgcc gggcgcttcc tgggcggccg ggtcggactg  
 420  
 acgatggacg tcttagcacc ctactgctg gcgctcgcca tctggtcgac atgtttcact  
 480  
 tcccaagcga tcatgaccgg ttttgaacgc cgttacgggg tgctcgaacg attgtccgca  
 540  
 accccgtag gtcggtcggg tctgctagct ggcaaggcga tggcttattc cgttatcagt  
 600  
 ctgctcagg tgatactgct tgtcatcatc tcttttagcgc tgggctggca cccccacggt  
 660  
 tccggcctgg cctggctccc aacctgggtg agcgttgtgc tcgccatgat gacattcggg  
 720  
 ctgcagcac tggcaatggc cggcgctggc aaagctgaag tactctcgg actggccaac  
 780  
 ttggtatata tc  
 792

<210> 1864  
 <211> 264  
 <212> PRT  
 <213> Homo sapiens

<400> 1864  
 Xaa Ile Leu Thr Pro Ala Ile Ile Arg Gly Ile Ser Leu Ser Lys Cys  
 1 5 10 15  
 Val Met Thr Gly Ser Pro Ser Cys Ser Leu Pro Thr Thr Trp Met Arg  
 20 25 30  
 Leu Asn Gly Trp Leu Ile Thr Ser Gly Ser Ser Ile Ala Ala Gly Ser  
 35 40 45  
 Gln Leu Met Glu Leu Cys Gln Ser Ser Pro Leu Ser Arg Val Trp Lys  
 50 55 60  
 Met Cys Ser Ser Leu Thr Leu Val Thr Ala Gln Gln Gly Gly Ile Asp  
 65 70 75 80  
 Met Thr Thr Leu Asp Leu Arg Pro Ala Pro Gln Ala Ala Pro Ala Ala  
 85 90 95  
 Ala Arg Val Arg Asn His Ala Leu Thr Glu Val Arg Leu Val Met Arg  
 100 105 110  
 Asn Gly Glu Gln Leu Leu Leu Ala Leu Val Ile Pro Ile Gly Ile Ile  
 115 120 125  
 Val Ala Gly Arg Phe Leu Gly Gly Arg Val Gly Leu Thr Met Asp Val  
 130 135 140  
 Leu Ala Pro Ser Val Leu Ala Leu Ala Ile Trp Ser Thr Cys Phe Thr  
 145 150 155 160  
 Ser Gln Ala Ile Met Thr Gly Phe Glu Arg Arg Tyr Gly Val Leu Glu  
 165 170 175  
 Arg Leu Ser Ala Thr Pro Leu Gly Arg Ser Gly Leu Leu Ala Gly Lys  
 180 185 190  
 Ala Met Ala Tyr Ser Val Ile Ser Leu Ala Gln Val Ile Leu Leu Val  
 195 200 205  
 Ile Ile Ser Leu Ala Leu Gly Trp His Pro His Gly Ser Gly Leu Ala  
 210 215 220  
 Trp Leu Pro Thr Leu Val Ser Val Val Leu Ala Met Met Thr Phe Gly  
 225 230 235 240  
 Leu Ala Ala Leu Ala Met Ala Gly Ala Gly Lys Ala Glu Val Thr Leu  
 245 250 255  
 Gly Leu Ala Asn Leu Val Tyr Ile  
 260

<210> 1865  
 <211> 717  
 <212> DNA  
 <213> Homo sapiens

<400> 1865  
 ngccggctga tcaaacaact cacagacatg ggcttcccgag gagagccagc tgaggaggcc  
 60  
 ttgaagagta acaatatgaa tcttgatcag gccatgagcg ctctgctgga aaagaagggtg  
 120  
 gacgtggaca agcgtgggct gggagtgacc gaccataatg gaatggccgc caagcccctc  
 180

ggctgccgcc cgccaatctc caaagagtct tccgtggacc gcccaccct tcttgacaag  
 240  
 gatggcggcc tcgtggaaga gcccacgcct tcaccgttct tgccttcccc aagcctgaag  
 300  
 ctcccccttt cacacagtgc actccccagt caggccctgg gtgggggtgc ctccgggctg  
 360  
 ggcattgcaaa acttgaattc ttctagacag ataccgagtg gcaatctggg tatgtttggc  
 420  
 aatagtggag cagcacaagc caggaccatg cagcagccgc cacagccacc agtgacgcct  
 480  
 cttaactctt cccagccagc tctccgtgct caagtgcctc agtttctatc cctcagggtt  
 540  
 caagcacagc ttttgcagtt tgcagcaaaa aacattggtc tcaaccctgc actattaacc  
 600  
 tcgcccaatta atcctcaaca tatgacgatg ttgaaccagc tctatcagct gcagctggga  
 660  
 taccaacggt tacaaatcca gcagcagatg ttacaggccc agcgtaatgt gtccgga  
 717

<210> 1866

<211> 239

<212> PRT

<213> Homo sapiens

<400> 1866

Xaa	Arg	Leu	Ile	Lys	Gln	Leu	Thr	Asp	Met	Gly	Phe	Pro	Arg	Glu	Pro
1				5					10					15	
Ala	Glu	Glu	Ala	Leu	Lys	Ser	Asn	Asn	Met	Asn	Leu	Asp	Gln	Ala	Met
			20					25					30		
Ser	Ala	Leu	Leu	Glu	Lys	Lys	Val	Asp	Val	Asp	Lys	Arg	Gly	Leu	Gly
		35					40					45			
Val	Thr	Asp	His	Asn	Gly	Met	Ala	Ala	Lys	Pro	Leu	Gly	Cys	Arg	Pro
	50				55					60					
Pro	Ile	Ser	Lys	Glu	Ser	Ser	Val	Asp	Arg	Pro	Thr	Leu	Leu	Asp	Lys
65				70					75					80	
Asp	Gly	Gly	Leu	Val	Glu	Glu	Pro	Thr	Pro	Ser	Pro	Phe	Leu	Pro	Ser
			85					90					95		
Pro	Ser	Leu	Lys	Leu	Pro	Leu	Ser	His	Ser	Ala	Leu	Pro	Ser	Gln	Ala
			100					105					110		
Leu	Gly	Gly	Val	Ala	Ser	Gly	Leu	Gly	Met	Gln	Asn	Leu	Asn	Ser	Ser
	115						120					125			
Arg	Gln	Ile	Pro	Ser	Gly	Asn	Leu	Gly	Met	Phe	Gly	Asn	Ser	Gly	Ala
	130					135				140					
Ala	Gln	Ala	Arg	Thr	Met	Gln	Gln	Pro	Pro	Gln	Pro	Pro	Val	Gln	Pro
145					150					155				160	
Leu	Asn	Ser	Ser	Gln	Pro	Ser	Leu	Arg	Ala	Gln	Val	Pro	Gln	Phe	Leu
			165					170					175		
Ser	Pro	Gln	Val	Gln	Ala	Gln	Leu	Leu	Gln	Phe	Ala	Ala	Lys	Asn	Ile
		180					185						190		
Gly	Leu	Asn	Pro	Ala	Leu	Leu	Thr	Ser	Pro	Ile	Asn	Pro	Gln	His	Met
	195						200					205			
Thr	Met	Leu	Asn	Gln	Leu	Tyr	Gln	Leu	Gln	Leu	Ala	Tyr	Gln	Arg	Leu
	210					215					220				
Gln	Ile	Gln	Gln	Gln	Met	Leu	Gln	Ala	Gln	Arg	Asn	Val	Ser	Gly	

225

230

235

<210> 1867  
<211> 518  
<212> DNA  
<213> Homo sapiens

<400> 1867  
nnggggcacg gttagggcca gtgggcagag gggtgaggga tatgcaggac cttccactgt  
60  
tccatgcatg ggacggcact tgggtccgcg atcaggtagc caggcatgga aggaacatgg  
120  
gaggaaggga actgtctggt gcgccagtgt tgttcaagga ggatgtgaca agacaggcca  
180  
tctggttggc tggccctggt acccaacaac gtgggtggcca aggccttggtg cccggagagg  
240  
ttcttggggg ccagcagggg gctacatagg acatgggtgg ggaccccgag tccgagccca  
300  
cctctcctgc ctccaccctt tccaccnng cagccccgcg ctctcccgca gaactctccc  
360  
caagccagac cgcttgacc ggctgcttaa gtcaggcttt gggacatacc ctgggaggaa  
420  
gcgaggtgct ttgcacccc aagtgatcat gttcccgtag ccagcctgcc aaggtgatgt  
480  
ggagcttggg gagcggggtc tggcagggtt tttccgga  
518

<210> 1868  
<211> 73  
<212> PRT  
<213> Homo sapiens

<400> 1868  
Gln Asp Arg Pro Ser Gly Trp Leu Ala Leu Leu Pro Asn Asn Val Val  
1 5 10 15  
Ala Lys Ala Leu Cys Pro Glu Arg Phe Leu Gly Ala Ser Arg Gly Leu  
20 25 30  
His Arg Thr Trp Val Gly Thr Pro Ala Pro Ser Pro Pro Leu Leu Pro  
35 40 45  
Pro Pro Leu Pro Pro Xaa Gln Pro Pro Pro Leu Pro Gln Asn Ser Pro  
50 55 60  
Gln Ala Arg Pro Pro Gly Pro Ala Ala  
65 70

<210> 1869  
<211> 436  
<212> DNA  
<213> Homo sapiens

<400> 1869  
acgcgtcacc ttcttctgtg agctactggg agccctcgga cacctgcgtg cattgcccga  
60  
ccgtgacatg ccgagcaccc aaacccacct gtggattcgc gagctgagcc gcacgcaccg  
120

cgacgtgtcg actgccaccc accttcgttg gagcgacgac ggcaccgtgc taggtcagac  
 180  
 gaccgacgat ggcaccgagc ctgaggttgt tgccctgccca gcggtctact gccgtcgttg  
 240  
 cgcccgagc ggatggggag tccagctcgc cagcaccggc aataacctca gcgagaacaa  
 300  
 cgacagcatc cgacggaccc acgcggcaca cgacggctgc ttcgagcct tgctttcggc  
 360  
 ccctcgagag ggagccagcg cggtcgacac cggcgaggcg acactgtcct tacgttggt  
 420  
 cgacaccgtc aacagg  
 436

<210> 1870

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1870

Met	Pro	Ser	Thr	Glu	Thr	His	Leu	Trp	Ile	Arg	Glu	Leu	Ser	Arg	Ile
1				5				10					15		
Asp	Arg	Asp	Val	Ser	Thr	Ala	Thr	His	Phe	Arg	Trp	Ser	Asp	Asp	Gly
			20					25					30		
Thr	Val	Leu	Gly	Gln	Thr	Thr	Asp	Asp	Gly	Thr	Glu	Pro	Glu	Val	Val
			35				40					45			
Ala	Leu	Pro	Ala	Val	Tyr	Cys	Arg	Arg	Cys	Gly	Arg	Ser	Gly	Trp	Gly
			50			55					60				
Val	Gln	Leu	Ala	Ser	Thr	Gly	Asn	Asn	Leu	Ser	Glu	Asn	Asn	Asp	Ser
65				70					75					80	
Ile	Arg	Arg	Thr	His	Ala	Ala	His	Asp	Gly	Arg	Phe	Arg	Ala	Leu	Leu
			85					90					95		
Ser	Ala	Pro	Arg	Glu	Gly	Ala	Ser	Ala	Val	Asp	Thr	Gly	Glu	Ala	Thr
			100					105					110		
Leu	Ser	Leu	Arg	Trp	Phe	Asp	Thr	Val	Asn	Arg					
			115				120								

<210> 1871

<211> 474

<212> DNA

<213> Homo sapiens

<400> 1871

nntgcagcgc cccgaggtcg atgtctccaa cgtctttgcc agccttgaca tggctagcga  
 60  
 gcccgacctc gtccgtaccc tgctgaggca agcccaacaa tgaccgggga acagctcgcg  
 120  
 cattggatcg aggagtcgac gtcgacggtg tttttcggcg gcgccggaat gtccaccgaa  
 180  
 tcaggtattc cggactttcg ctccgctggc gggctttaca ccaactcagca tgacctgccc  
 240  
 ttccccgagg agtacatgct cagtcacagc tgtttggttg agcatccgc ggagttcttc  
 300  
 gactttctacc gcacctacct catccatcct caggccaggc ccaatgctgg tcactgtgag  
 360



ttggttgccct tggagcaggc tggggaactt tcgacgatca ttacccagaa tattgacggc  
 420  
 ctgcaccaag aagctggggtc tcgtcaggtc attgagttgc atgggtcggg gcac  
 474

<210> 1872  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 1872  
 Met Thr Gly Glu Gln Leu Ala His Trp Ile Glu Glu Ser Thr Ser Thr  
 1 5 10 15  
 Val Phe Phe Gly Gly Ala Gly Met Ser Thr Glu Ser Gly Ile Pro Asp  
 20 25 30  
 Phe Arg Ser Ala Gly Gly Leu Tyr Thr Thr Gln His Asp Leu Pro Phe  
 35 40 45  
 Pro Ala Glu Tyr Met Leu Ser His Ser Cys Leu Val Glu His Pro Ala  
 50 55 60  
 Glu Phe Phe Asp Phe Tyr Arg Thr Tyr Leu Ile His Pro Gln Ala Arg  
 65 70 75 80  
 Pro Asn Ala Gly His Arg Ala Leu Val Ala Leu Glu Gln Ala Gly Glu  
 85 90 95  
 Leu Ser Thr Ile Ile Thr Gln Asn Ile Asp Gly Leu His Gln Glu Ala  
 100 105 110  
 Gly Ser Arg Gln Val Ile Glu Leu His Gly Ser Val His  
 115 120 125

<210> 1873  
 <211> 338  
 <212> DNA  
 <213> Homo sapiens

<400> 1873  
 nacgcgtaga aatgaagccc cagctgggtca gagaccggaa atccggtagt gcacgggacg  
 60  
 ggttccctcg gggatctcgg aggggagacc cccacccggg aggactggag gcagcgctc  
 120  
 tcccgccccg gcgcgcgcag cctatttccc tctttccaag gggccaatcc ccaccgcggc  
 180  
 ccgcaggggg cygcgtcaag gcaagggtccg cggcgagaac ggtgcccagt gggagcgaag  
 240  
 ggcgaggcca gcccttggtc cttggccggc agttcgggtc ccgcctccaa attttagtat  
 300  
 gcatatgagt caccaggaaa gttttttgaa acaaattt  
 338

<210> 1874  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 1874  
 Ser Pro Ser Trp Ser Glu Thr Gly Asn Pro Val Val His Gly Thr Gly

```

      1           5           10           15
Ser Leu Gly Asp Leu Gly Gly Glu Thr Pro Thr Arg Glu Asp Trp Arg
      20           25           30
Gln Arg Leu Ser Arg Pro Gly Ala Arg Ser Leu Phe Pro Ser Phe Gln
      35           40           45
Gly Ala Asn Pro His Arg Gly Pro Gln Gly Ala Arg Ser Arg Gln Gly
      50           55           60
Pro Arg Arg Glu Arg Cys Pro Val Gly Ala Lys Gly Glu Ala Ser Pro
      65           70           75           80
Trp Ser Leu Ala Gly Ser Ser Gly Pro Ala Ser Lys Phe
      85           90

```

<210> 1875  
 <211> 366  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1875
aagcttggcg tacaagtggg tcgtcggttc tcaggtgggt gagccgtgta tcacgatatg
60
ggcaatatct gcttctgctt cattacagaa gatgatggcg atagcttcg tgattttgga
120
aaattcacag aaccggtgat tgaagcactc cataaaatgg gagcaacagg ggcagagtta
180
caaggacgta acgaccttct catcgacgga aagaaattct ctggaaatgc gatgtactca
240
aacaatggcc gtttaacagc gcacggaaca ttaatgttgg atttagatgt gagcattttg
300
ccacaaattt tacgtccaaa acaagagaaa atcgagtcaa aaggaatcaa gtcgggttcgt
360
tcacgc
366

```

<210> 1876  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1876
Lys Leu Gly Val Gln Val Val Arg Arg Phe Ser Gly Gly Gly Ala Val
      1           5           10           15
Tyr His Asp Met Gly Asn Ile Cys Phe Cys Phe Ile Thr Glu Asp Asp
      20           25           30
Gly Asp Ser Phe Arg Asp Phe Gly Lys Phe Thr Glu Pro Val Ile Glu
      35           40           45
Ala Leu His Lys Met Gly Ala Thr Gly Ala Glu Leu Gln Gly Arg Asn
      50           55           60
Asp Leu Leu Ile Asp Gly Lys Lys Phe Ser Gly Asn Ala Met Tyr Ser
      65           70           75           80
Asn Asn Gly Arg Leu Thr Ala His Gly Thr Leu Met Leu Asp Leu Asp
      85           90           95
Val Ser Ile Leu Pro Gln Ile Leu Arg Pro Lys Gln Glu Lys Ile Glu
      100          105          110
Ser Lys Gly Ile Lys Ser Val Arg Ser Arg

```

115

120

&lt;210&gt; 1877

&lt;211&gt; 357

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1877

acgcgtgagt ggtcgcaaat atgacgggca agaaacgctt agaaagaaac taccatttaa  
 60  
 cgaggttatg caaattgcag aaatctctct atcggattgt ggctatatta tttcatcttt  
 120  
 ccaagctgct ggaccaaggg ctgtagggtt gcaacgacct attatatctg aacatttttt  
 180  
 tcaatttgac ccatttgata aacgacattg ggttgtctca catcatttac cacacgctgc  
 240  
 gacagctgct ttcacttccg gatttgaaga ttgcgctgga ttagtttcag atactgccgg  
 300  
 atcgaacact cttgatggaa aggactatgt tgaaagctgc tgcaatgcta ttccacg  
 357

&lt;210&gt; 1878

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1878

Met	Gln	Ile	Ala	Glu	Ile	Ser	Leu	Ser	Asp	Cys	Gly	Tyr	Ile	Ile	Ser
1				5				10					15		
Ser	Phe	Gln	Ala	Ala	Gly	Pro	Arg	Ala	Val	Gly	Leu	Gln	Arg	Pro	Ile
		20					25					30			
Ile	Ser	Glu	His	Phe	Phe	Gln	Phe	Asp	Pro	Phe	Asp	Lys	Arg	His	Trp
		35				40					45				
Val	Val	Ser	His	His	Leu	Pro	His	Ala	Ala	Thr	Ala	Ala	Phe	Thr	Ser
		50				55					60				
Gly	Phe	Glu	Asp	Cys	Ala	Gly	Leu	Val	Ser	Asp	Thr	Ala	Gly	Ser	Asn
65					70					75				80	
Thr	Leu	Asp	Gly	Lys	Asp	Tyr	Val	Glu	Ser	Cys	Cys	Asn	Ala	Ile	Pro
			85					90						95	

&lt;210&gt; 1879

&lt;211&gt; 1062

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1879

nacgcgtgga tgctccttgg acggcttttt cgtggtagag ggttcccggg gcgcgccgca  
 60  
 tccctgggaa gtagctgaag agaaggcaca ggaagagtcg cctccactga tggctccct  
 120  
 gtccctccca caggctctga cgcccgtctt gcggcttcgg tgtttgaaca ggccacagtc  
 180  
 caggagcgct tacattcagg agctccgcgt agcacctgcc caaccaaact cagccctccg  
 240

ttaagatcct ggttccatgc cgcagtagga cagcaggccc aagtctgcac atcccagtga  
 300  
 tgcaccatgc caatagtgga taagttgaag gaggccctga aaccggccg caaggactcg  
 360  
 gctgatgatg gagaactggg gaagcttctt gcctcctctg ccaagaaggt ccttttacag  
 420  
 aaaatcgagt tcgagccagc cagcaagagc ttctcctacc agctggaggc cttaaagagc  
 480  
 aaatatgtgt tgctcaaccc caaacagag ggagctagtc gccacaagag tggagatgac  
 540  
 ccacgggcca ggagacaggg cagtgaacac acgtatgaga gctgtggtga cggagtccca  
 600  
 gccccgcaga aagtgtcttt cccacggag cgactgtctc tgaggtggga gcgggtcttc  
 660  
 cgcgtgggcg caggactcca caacctggc aacacctgct ttctcaatgc caccatccag  
 720  
 tgcttgacct acacaccacc tctagccaac tacctgtctt ccaaggagca tgctcgagc  
 780  
 tgccaccagg gaagcttctg catgctgtgt gtcatgcaga accacattgt ccaggccttc  
 840  
 gccaacagcg gcaacgccat caagccgctc tccttcatcc gagacctgaa aaagatcgcc  
 900  
 cgacacttcc gctttgggaa ccaggaggac gcgcatgagt tcctgcggtg caccatcgac  
 960  
 gccatgcaga aagcctgcct gaatggtgt gccaaagtgg atcgtcaaac gcaggctact  
 1020  
 accttggtcc atcaaatttt tggagggtat ctcagatcac gc  
 1062

<210> 1880

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1880

Met	Pro	Ile	Val	Asp	Lys	Leu	Lys	Glu	Ala	Leu	Lys	Pro	Gly	Arg	Lys
1				5				10					15		
Asp	Ser	Ala	Asp	Asp	Gly	Glu	Leu	Gly	Lys	Leu	Leu	Ala	Ser	Ser	Ala
		20						25					30		
Lys	Lys	Val	Leu	Leu	Gln	Lys	Ile	Glu	Phe	Glu	Pro	Ala	Ser	Lys	Ser
		35				40						45			
Phe	Ser	Tyr	Gln	Leu	Glu	Ala	Leu	Lys	Ser	Lys	Tyr	Val	Leu	Leu	Asn
	50				55				60						
Pro	Lys	Thr	Glu	Gly	Ala	Ser	Arg	His	Lys	Ser	Gly	Asp	Asp	Pro	Pro
65				70					75					80	
Ala	Arg	Arg	Gln	Gly	Ser	Glu	His	Thr	Tyr	Glu	Ser	Cys	Gly	Asp	Gly
			85					90					95		
Val	Pro	Ala	Pro	Gln	Lys	Val	Leu	Phe	Pro	Thr	Glu	Arg	Leu	Ser	Leu
		100						105					110		
Arg	Trp	Glu	Arg	Val	Phe	Arg	Val	Gly	Ala	Gly	Leu	His	Asn	Leu	Gly
	115					120					125				
Asn	Thr	Cys	Phe	Leu	Asn	Ala	Thr	Ile	Gln	Cys	Leu	Thr	Tyr	Thr	Pro
	130				135						140				
Pro	Leu	Ala	Asn	Tyr	Leu	Leu	Ser	Lys	Glu	His	Ala	Arg	Ser	Cys	His

```

145          150          155          160
Gln Gly Ser Phe Cys Met Leu Cys Val Met Gln Asn His Ile Val Gln
          165          170          175
Ala Phe Ala Asn Ser Gly Asn Ala Ile Lys Pro Val Ser Phe Ile Arg
          180          185          190
Asp Leu Lys Lys Ile Ala Arg His Phe Arg Phe Gly Asn Gln Glu Asp
          195          200          205
Ala His Glu Phe Leu Arg Tyr Thr Ile Asp Ala Met Gln Lys Ala Cys
          210          215          220
Leu Asn Gly Cys Ala Lys Leu Asp Arg Gln Thr Gln Ala Thr Thr Leu
225          230          235          240
Val His Gln Ile Phe Gly Gly Tyr Leu Arg Ser Arg
          245          250

```

&lt;210&gt; 1881

&lt;211&gt; 358

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1881

```

natcaccatg gatggacgcc ggcaaagcaa catcaatcga tgtcaagcca cagacatctc
60
aaatccctgc agaaccgcaa agtttggcag agaagaagga tgaatgggag atcgcataca
120
tcaacacgaa gattaacgac gtctacaacc ctctcaacaa caatgtggac tggttaagca
180
cgagaattga tctgctacag caagatttgg acaccactcg caagaaggat ctaaaaccag
240
ccacatcgat cgatatctgc accatcacat cgatcgatag caagttcgta gccatggaag
300
ataggttaca atcttataag gatatgcacg accgtttcac ctcacctatc aggcgata
358

```

&lt;210&gt; 1882

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1882

```

Met Asp Ala Gly Lys Ala Thr Ser Ile Asp Val Lys Pro Gln Thr Ser
1      5      10      15
Gln Ile Pro Ala Glu Pro Gln Ser Leu Ala Glu Lys Lys Asp Glu Trp
20     25     30
Glu Ile Ala Tyr Ile Asn Thr Lys Ile Asn Asp Val Tyr Asn Pro Leu
35     40     45
Asn Asn Asn Val Asp Trp Leu Ser Thr Arg Ile Asp Leu Leu Gln Gln
50     55     60
Asp Leu Asp Thr Thr Arg Lys Lys Asp Leu Lys Pro Ala Thr Ser Ile
65     70     75     80
Asp Ile Cys Thr Ile Thr Ser Ile Asp Ser Lys Phe Val Ala Met Glu
85     90     95
Asp Arg Leu Gln Ser Tyr Lys Asp Met His Asp Arg Phe Thr Ser Pro
100    105    110
Ile Arg Arg

```

115

<210> 1883  
 <211> 367  
 <212> DNA  
 <213> Homo sapiens

<400> 1883  
 ggatcctatc atgaatctgc actctgacca gggaagtaac tcccttggt gctcagactt  
 60  
 gggctgggag aatgatacta agacaccaga catcacatcc attgctccca ttcccactat  
 120  
 tgctgaaggc gatgagtctg tatttgtaa ctccaattca aacagctcga tggcgctcc  
 180  
 tgtcctggag aacaatgctg ttgatctcac tgatgggctg acagatttgg aatcctatat  
 240  
 gaggtttctt atggatggcg gngcaagtga ttcaattgat agccttctga acctgatgg  
 300  
 atcacaggat cttggtagca atatggacct ctggaccttc gatgacatgc ccacgctgg  
 360  
 cgatttn  
 367

<210> 1884  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1884  
 Met Asn Leu His Ser Asp Gln Gly Ser Asn Ser Leu Gly Cys Ser Asp  
 1 5 10 15  
 Leu Gly Trp Glu Asn Asp Thr Lys Thr Pro Asp Ile Thr Ser Ile Ala  
 20 25 30  
 Pro Ile Pro Thr Ile Ala Glu Gly Asp Glu Ser Val Phe Val Asn Ser  
 35 40 45  
 Asn Ser Asn Ser Ser Met Val Pro Pro Val Leu Glu Asn Asn Ala Val  
 50 55 60  
 Asp Leu Thr Asp Gly Leu Thr Asp Leu Glu Ser Tyr Met Arg Phe Leu  
 65 70 75 80  
 Met Asp Gly Gly Ala Ser Asp Ser Ile Asp Ser Leu Leu Asn Leu Asp  
 85 90 95  
 Gly Ser Gln Asp Leu Gly Ser Asn Met Asp Leu Trp Thr Phe Asp Asp  
 100 105 110  
 Met Pro Ile Ala Gly Asp Xaa  
 115

<210> 1885  
 <211> 392  
 <212> DNA  
 <213> Homo sapiens

<400> 1885  
 nacgcgtatt cgcaaagaat gtctttgcgg cacagagaca gtcgtcgtcc tcgacaccat  
 60

gttcgacgat ctccggcatgt tgggaacccg gtgatttctc gcttgccggcg cacctcgtgg  
 120  
 ctgcgtagta cagctgctgt tgcgcgccgg gccgcgaccg gtaccggggt ccaaccactg  
 180  
 aactggtgga tcctcgtcat tcccggcttc gctgcgctca tcctgctggt gcgcaacgcc  
 240  
 actggtcggg ccgcggcagg actgggggtat ctcttcggca tcgggtctgtt taccaccacc  
 300  
 atttcctggg taggcgtcat cggccccccg gtggcgatac ttctcatcgc tgtcatggcg  
 360  
 ttgtggtgtc tgctggccgg gtggacgatt cg  
 392

<210> 1886

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1886

Xaa	Ala	Tyr	Ser	Gln	Arg	Met	Ser	Leu	Arg	His	Arg	Asp	Ser	Arg	Arg
1				5				10					15		
Pro	Arg	His	His	Val	Arg	Arg	Ser	Arg	His	Val	Gly	Asn	Pro	Val	Ile
		20					25					30			
Ser	Arg	Leu	Arg	Arg	Thr	Ser	Trp	Leu	Arg	Ser	Thr	Ala	Ala	Val	Ala
		35				40					45				
Ala	Gly	Ala	Ala	Thr	Gly	Thr	Gly	Phe	Gln	Pro	Leu	Asn	Trp	Trp	Ile
	50				55				60						
Leu	Val	Ile	Pro	Gly	Leu	Ala	Ala	Leu	Ile	Leu	Leu	Val	Arg	Asn	Ala
65				70				75				80			
Thr	Gly	Arg	Ala	Ala	Ala	Gly	Leu	Gly	Tyr	Leu	Phe	Gly	Ile	Gly	Leu
			85				90					95			
Phe	Thr	Thr	Thr	Ile	Ser	Trp	Val	Gly	Val	Ile	Gly	Pro	Pro	Val	Ala
		100					105				110				
Ile	Leu	Leu	Ile	Ala	Val	Met	Ala	Leu	Trp	Cys	Leu	Leu	Ala	Gly	Trp
		115					120				125				
Thr	Ile														
	130														

<210> 1887

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1887

cgcgagttca ttcggacctt tgaggacgtt gccaaagcgtc tcaatgggga ccagccgatc  
 60  
 gacttcttgg tgcagggaaac tttatatccc gatgtcgtcg agtctggtgg cggtaggggc  
 120  
 gctgccaata tcaagagtca ccataatggt ggtgggctcc ctgacgacct ccagttcagt  
 180  
 ctcggtgagc cattgcgcac cctctttaag gacgaggtgc gagccgtcgg actcgaactt  
 240  
 ggtctgcccg aggacatcgt ctggcgctcag cccttcccg gcccggggct ggctatccgc  
 300

attattggcg aagtcaccgc ggagcgtctg gaggtgctac gcactgccga tgccatcacg  
 360  
 cgt  
 363

<210> 1888  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 1888  
 Arg Glu Phe Ile Arg Thr Phe Glu Asp Val Ala Lys Arg Leu Asn Gly  
   1                  5                  10                  15  
 Asp Gln Pro Ile Asp Phe Leu Val Gln Gly Thr Leu Tyr Pro Asp Val  
                   20                  25                  30  
 Val Glu Ser Gly Gly Gly Glu Gly Ala Ala Asn Ile Lys Ser His His  
           35                  40                  45  
 Asn Val Gly Gly Leu Pro Asp Asp Leu Gln Phe Ser Leu Val Glu Pro  
   50                  55                  60  
 Leu Arg Thr Leu Phe Lys Asp Glu Val Arg Ala Val Gly Leu Glu Leu  
 65                  70                  75                  80  
 Gly Leu Pro Glu Asp Ile Val Trp Arg Gln Pro Phe Pro Gly Pro Gly  
                   85                  90                  95  
 Leu Ala Ile Arg Ile Ile Gly Glu Val Thr Ala Glu Arg Leu Glu Val  
           100                  105                  110  
 Leu Arg Thr Ala Asp Ala Ile Thr Arg  
       115                  120

<210> 1889  
 <211> 530  
 <212> DNA  
 <213> Homo sapiens

<400> 1889  
 gcaccagatc tgctcatggc gcgcatttgc acggcaacgc agtcgatccg gcttgggtct  
 60  
 ggtgggggtga tggccatgca ctacgggtcg ctgcaaatac cggaacgggt ttcgaccctc  
 120  
 acagcgctct tcggtgatcg tatcgacatg gggctggggc gggctcccgg cggtgacatg  
 180  
 ctctccgccc atgccctcaa tcaggggcag gtcattccgc ctgaggccat taattccctc  
 240  
 atcgccgaaa cggtagggtt cgtgcgcgaa atgctaccgt cgaagcatcc gtacgcaaag  
 300  
 gtcgtcgtga ccccggcagg tcagatccag ccacagacgt ggctgctggg atcgtcgggc  
 360  
 cagtcagcag cgtgggctgg tgagcagggt atggactacg cctacgccca gtttttcacc  
 420  
 gggcgccagg acaccgggat catggatcac taccgcgcgc acctgtccga cggcttcccc  
 480  
 ggcaggaccc tctcagcagt gtgtgtatcg gctgctccga cgcgtccgga  
 530

<210> 1890



<211> 176  
 <212> PRT  
 <213> Homo sapiens

<400> 1890  
 Ala Pro Asp Leu Leu Met Ala Arg Ile Ala Thr Ala Thr Gln Ser Ile  
   1                  5                  10                  15  
 Arg Leu Gly Ser Gly Gly Val Met Ala Met His Tyr Gly Ser Leu Gln  
           20                  25                  30  
 Ile Ala Glu Arg Phe Ser Thr Leu Thr Ala Leu Phe Gly Asp Arg Ile  
       35                  40                  45  
 Asp Met Gly Leu Gly Arg Ala Pro Gly Gly Asp Met Leu Ser Ala His  
       50                  55                  60  
 Ala Leu Asn Gln Gly Gln Val Ile Arg Pro Glu Ala Ile Asn Ser Leu  
 65                  70                  75                  80  
 Ile Ala Glu Thr Val Gly Phe Val Arg Glu Met Leu Pro Ser Lys His  
           85                  90                  95  
 Pro Tyr Ala Lys Val Val Val Thr Pro Ala Gly Gln Ile Gln Pro Gln  
           100                  105                  110  
 Thr Trp Leu Leu Gly Ser Ser Gly Gln Ser Ala Ala Trp Ala Gly Glu  
       115                  120                  125  
 Gln Gly Met Asp Tyr Ala Tyr Ala Gln Phe Phe Thr Gly Arg Gln Asp  
       130                  135                  140  
 Thr Gly Ile Met Asp His Tyr Arg Ala His Leu Ser Asp Gly Phe Pro  
 145                  150                  155                  160  
 Gly Arg Thr Leu Ser Ala Val Cys Val Ser Ala Ala Pro Thr Arg Pro  
           165                  170                  175

<210> 1891  
 <211> 423  
 <212> DNA  
 <213> Homo sapiens

<400> 1891  
 agatctcagg gagacagagg ggcccgggat aggaagaata tgtgggcacc tctccacag  
 60  
 tcctccatct gcacaaggct acccactctg cagatggccc ctgcttgacag agagatccag  
 120  
 cgtcaattta cagaggcagc ccagcttcct atcaactttc tggcctggct taacggtgta  
 180  
 atgggcaggg ggcaaggcct tgaccacact catgtttctc ccccggcctc ctccactctg  
 240  
 ggattttgta ccggtatggg gaggcactac ggttgacagat ttagcttttc agcgtggata  
 300  
 caagcaccca agtgtccag accacagcag aaaccgtggt gctgccgttt ccaacctgct  
 360  
 gatttggtct cttgctgccg ttctgaccaa cagaattgct actgactgac aaatcccttg  
 420  
 tgc  
 423

<210> 1892  
 <211> 121  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1892

```

Met Trp Ala Pro Leu Pro Gln Ser Ser Ile Cys Thr Arg Leu Pro Thr
 1           5           10           15
Leu Gln Met Ala Pro Ala Cys Arg Glu Ile Gln Arg Gln Phe Thr Glu
 20           25           30
Ala Ala Gln Leu Pro Ile Asn Phe Leu Ala Trp Leu Asn Gly Val Met
 35           40           45
Gly Arg Gly Gln Gly Leu Asp His Thr His Val Ser Pro Pro Ala Ser
 50           55           60
Ser Thr Leu Gly Phe Cys Thr Gly Met Gly Arg His Tyr Gly Cys Arg
 65           70           75           80
Phe Ser Phe Ser Ala Trp Ile Gln Ala Pro Lys Cys Pro Arg Pro Gln
 85           90           95
Gln Lys Pro Cys Cys Arg Phe Gln Pro Ala Asp Leu Val Ser Cys
100           105           110
Cys Arg Ser Asp Gln Gln Asn Cys Tyr
115           120

```

&lt;210&gt; 1893

&lt;211&gt; 886

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1893

```

accggtggtg ctgaaccggc ccgagttgcc cttcctagcc ggatatacgt cgagggacgt
60
catgacgctg aactcgtcga aaagatatgg ggcgacgacc tgcgccacgt cggggtcggt
120
gtggaataca tgggtggcat ggacgacctc gtcgggatcg tcgccagatt taagcctggt
180
ccggggcatc gccttggcgt gttggttgac cacctcgttg ccgacaccaa agagtcacgg
240
gtagcggacg aagtagctcg tggtaggtat agcgagtatg tcatgattac cggtcatcgc
300
tttattgaca tctggcaggc catcaaacct caacgaattg gccgtcaaga atggcctgag
360
gtcccgatgg acgaagactt caaactcggc accctgaagc gtctgggcct gcctcactcg
420
acccaagctg acgtcggtaa ggctggcag gccatgctgg cagcagtgcg cgactggcac
480
gatttagacc cccgctttaa cacggagatg gagaaactta tcgatttcgt caccgctgac
540
catgtcgacg agctggacaa tggggagatg gcatgagtat tgacgtcgac acggtgtctg
600
acctcatccg ggatgtgagt gccagggtta tcgatccccg gtcccgacc ctccacgac
660
atcaaatcca ccagaaaaag cccggggact tcgttactga tgccgatcgt caggccgagt
720
gcgagctggg tgccgctgtg accaagtatg ccggcggtat tgctgtgggg gaggaatcag
780
ccttcgccga cccaaccatc cttgatgccg tttccgatgc tgacctggcc tgggtcatcg
840

```

accccatgga tggcactaag aacttcgtgc acgggtctgt tgatca  
886

<210> 1894

<211> 191

<212> PRT

<213> Homo sapiens

<400> 1894

Thr	Gly	Gly	Ala	Glu	Pro	Ala	Arg	Val	Ala	Leu	Pro	Ser	Arg	Ile	Tyr
1				5					10					15	
Val	Glu	Gly	Arg	His	Asp	Ala	Glu	Leu	Val	Glu	Lys	Ile	Trp	Gly	Asp
			20					25					30		
Asp	Leu	Arg	His	Val	Gly	Val	Val	Val	Glu	Tyr	Met	Gly	Gly	Met	Asp
		35					40					45			
Asp	Leu	Val	Gly	Ile	Val	Ala	Glu	Phe	Lys	Pro	Gly	Pro	Gly	His	Arg
	50					55				60					
Leu	Gly	Val	Leu	Val	Asp	His	Leu	Val	Ala	Asp	Thr	Lys	Glu	Ser	Arg
65					70					75					80
Val	Ala	Asp	Glu	Val	Arg	Arg	Gly	Gly	Tyr	Ser	Glu	Tyr	Val	Met	Ile
				85					90					95	
Thr	Gly	His	Arg	Phe	Ile	Asp	Ile	Trp	Gln	Ala	Ile	Lys	Pro	Gln	Arg
			100					105					110		
Ile	Gly	Arg	Gln	Glu	Trp	Pro	Glu	Val	Pro	Met	Asp	Glu	Asp	Phe	Lys
			115				120					125			
Leu	Gly	Thr	Leu	Lys	Arg	Leu	Gly	Leu	Pro	His	Ser	Thr	Gln	Ala	Asp
	130					135					140				
Val	Gly	Lys	Ala	Trp	Gln	Ala	Met	Leu	Ala	Arg	Val	Arg	Asp	Trp	His
145					150					155					160
Asp	Leu	Asp	Pro	Arg	Phe	Asn	Thr	Glu	Met	Glu	Lys	Leu	Ile	Asp	Phe
			165					170					175		
Val	Thr	Arg	Asp	His	Val	Asp	Glu	Leu	Asp	Asn	Gly	Glu	Met	Ala	
			180					185					190		

<210> 1895

<211> 2555

<212> DNA

<213> Homo sapiens

<400> 1895

nntcatgatt tttggagggtg ggttgtacct cctgaacttc tagctttcaa gttgtggctg  
60  
ttttttgttt ttgtttttgt ttttgttttc tttagaattt ttcctgttt cccaccttct  
120  
cttccccctgt tgccaagggtc taactcactg tagtctggat gtgggtgtat gttcatgtac  
180  
acaacttttag aaagttgctt gcagaacaaa aaggctacac aaaagccac tggctctcaa  
240  
tacctcaag tggatggcag aggtctctgt tgaaagtggg caatttgcaa tctttgcatt  
300  
aggatttcag atgcatgcca ggtttccact gattgccaga actcgagatc actacacatg  
360  
gatccccaaa atcaacatgg cagtggcagt tcgttagttg tgatccagca gccttctttg  
420

gatagccgtc agagattaga ctatgagaga gagattcagc ctactgctat tttgtcctta  
480  
gaccagatca aggccataag aggcagcaat gaatacacag aagggccttc ggtggtgaaa  
540  
agacctgctc ctcgagacgc accaagacaa gaaaagcatg aaaggactca tgaaatcata  
600  
ccaattaatg tgaataataa ctacgagcac agacacacaa gccacctggg acatgcagta  
660  
ctcccaagta atgccagggg ccccatcttg agcagatcaa ccagcactgg aagtgcagcc  
720  
agctctggga gcaacagcag tgcctcttct gaacagggac tgtaggaag gtcaccacca  
780  
accagaccag tccctgggtca taggtctgaa agggcaatcc ggaccagcc caagcaactg  
840  
attgtggatg acttgaaggg ttccttgaaa gaggacctga cacagcaciaa gttcatttgt  
900  
gaacagtgtg ggaagtgcaa gtgtggagaa tgcactgctc ccaggaccct accatcctgt  
960  
ttggcctgta accggcagtg cctttgctct gctgagagca tgggtgaata tggaacctgc  
1020  
atgtgcttag tcaagggcat cttctaccac tgctccaatg acgacgaagg ggattcctat  
1080  
tcagataatc cttgctcctg ttcacaaatca cactgctgct ctagatacct gtgtatggga  
1140  
gccatgtctt tatttttacc ttgcttactc tgttatectc ctgctaaagg atgctgaag  
1200  
ctgtgcagga ggtgttatga ctggatccat cggccagggt gcagatgtaa gaactccaac  
1260  
actgtctatt gtaagctgga gagctgcccc tcccggggtc agggtaaacc atcatgattt  
1320  
ttggagggtg gttgtacctc ctgaacttct agctttcaag ttgtggctgt tttttgtttt  
1380  
tgtttttgtt tttgttttct ttagaatttt tccctgtttc ccacettctc tccccctgtt  
1440  
gccaaagtct aactcatgga tttttctctt tcctcatgga tgatcttcag caagagtgga  
1500  
ctgggaagct gcacctggct cccactttca acaagagcct ctgccatcca cttgagggta  
1560  
ttgagagcca gtgggctttt gtgtagcctt tttgttctgc aagcaacttt ctaaagtgtt  
1620  
gtacatgaac atacaccac atccagacta cagtgtattt gagttgtttt gattgggtac  
1680  
cgtgggagca gggaaattgg ttttttaaaa agcaactggt taattgttta aataagctat  
1740  
gtattaaatc tgtctccagt tagggctatc ttcctagcat agggccctta agtagcatgg  
1800  
gggatatatt ttttgctata acgtaaaaat tttcctttta ccaactgccct ctctttctc  
1860  
cttcaagggt ctttccccct cagttttgtt gttgtcttac tctggagatg ccaagtgtat  
1920  
tttttctctc tatgtaattt tagattcgcc ttacaatgta aatcttcaca ttggagataa  
1980  
tattggttgg accttgccca tcttcaactc agccttcgta tttgtgaagg actcagccac  
2040

cttccttctt caccatgc ttctcaccaa atttttgttg tcattgaggg cacttggata  
 2100  
 actcaagttg atatttatag ctgatcaatc tatatgtgtc acagaactat gctgcctaaa  
 2160  
 gtgatcttgg ctccttaatg gtccttttgg ccccttggat agttaacagc tgagtaattc  
 2220  
 taatctcttc tgtgttttcc ttgccttaac cacaaattgt ggtgcttttt gtatatattta  
 2280  
 tgtataaatc acaaagttga attctgacta tttttaagac aaaagtctgt taaacttttt  
 2340  
 tattgtaaag aatatttatt atgcgaatct ctattatttt atggtattta ttgcaaaaga  
 2400  
 ctgttgaaat gtactcatgt ttgaatataa caaaatatca atacttaacg gaaaataagg  
 2460  
 tgacacgaag aaagtacata tgtaactat aatgcagaaa atatattaat taatgaaaaa  
 2520  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa  
 2555

<210> 1896  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 1896  
 Cys Glu Gln Cys Gly Lys Cys Lys Cys Gly Glu Cys Thr Ala Pro Arg  
 1 5 10 15  
 Thr Leu Pro Ser Cys Leu Ala Cys Asn Arg Gln Cys Leu Cys Ser Ala  
 20 25 30  
 Glu Ser Met Val Glu Tyr Gly Thr Cys Met Cys Leu Val Lys Gly Ile  
 35 40 45  
 Phe Tyr His Cys Ser Asn Asp Asp Glu Gly Asp Ser Tyr Ser Asp Asn  
 50 55 60  
 Pro Cys Ser Cys Ser Gln Ser His Cys Cys Ser Arg Tyr Leu Cys Met  
 65 70 75 80  
 Gly Ala Met Ser Leu Phe Leu Pro Cys Leu Leu Cys Tyr Pro Pro Ala  
 85 90 95  
 Lys Gly Cys Leu Lys Leu Cys Arg Arg Cys Tyr Asp Trp Ile His Arg  
 100 105 110  
 Pro Gly Cys Arg Cys Lys Asn Ser Asn Thr Val Tyr Cys Lys Leu Glu  
 115 120 125  
 Ser Cys Pro Ser Arg Gly Gln Gly Lys Pro Ser  
 130 135

<210> 1897  
 <211> 938  
 <212> DNA  
 <213> Homo sapiens

<400> 1897  
 cgtcatggct gctacgtgtg cggnaagagc tttgcctggc gctccacact ggtggagcac  
 60  
 gtctacagtc aactggcgga gaagcccttc cactgcactg actgcggcaa gggcttcggc  
 120

cacgcttcct ccctgagcaa acaccgggcc atccatcgtg gggagcggcc ccaccgctgt  
 180  
 ctggagtgtg gccgggcctt caccgagcgc tcggcgctga cttcgacact gcgcgtccac  
 240  
 accggcgaga aaccctatgg ctgcgcgcac tgtggcgcgc gcttcagcca gagctctgcc  
 300  
 ctctaccagc accggcgcggt gcacagcggc gagacccctt tccctgccc ggactgtggc  
 360  
 cgcgcccttcg cctacccctc ggacctgcgg cgccacgtgc gcatccacac gggcgagaag  
 420  
 ccctaccctt gccagactg tgggcgcgcg tttctcctt cctccctgct ggtcagtcac  
 480  
 cgggcggcac actccggcga gtgccctat gttgtgacc agtgtggcaa acgtttctcc  
 540  
 cagcgcaaga acctctccca gcaccaggtc atccatacag gggagaagcc ctatcactgc  
 600  
 cctgactgtg gtcgctgctt ccggaggagc cggtccttgg ccaatcaccg gaccacacac  
 660  
 acaggtgaaa aacccaccca gtgccctagc tgtggacgtc gcttcgcta cccctccctg  
 720  
 ctggccagcc accggcgcggt gcaactcggc gagcggccct atgcctgcga cctttgctcc  
 780  
 aagcgttttg ctacgtggag ccacctggcc cagcaccagc tgctgcacac gggggagaag  
 840  
 cctttccctt gcctcgagtg tggcgggct tccgccagag gtggtctctg gctgtccaca  
 900  
 agtgtagccc caaggcccca aactgtagcc ctatgctt  
 938

&lt;210&gt; 1898

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1898

Arg	His	Gly	Cys	Tyr	Val	Cys	Gly	Lys	Ser	Phe	Ala	Trp	Arg	Ser	Thr
1				5				10						15	
Leu	Val	Glu	His	Val	Tyr	Ser	His	Thr	Gly	Glu	Lys	Pro	Phe	His	Cys
			20					25					30		
Thr	Asp	Cys	Gly	Lys	Gly	Phe	Gly	His	Ala	Ser	Ser	Leu	Ser	Lys	His
		35					40					45			
Arg	Ala	Ile	His	Arg	Gly	Glu	Arg	Pro	His	Arg	Cys	Leu	Glu	Cys	Gly
		50				55					60				
Arg	Ala	Phe	Thr	Gln	Arg	Ser	Ala	Leu	Thr	Ser	His	Leu	Arg	Val	His
65				70				75						80	
Thr	Gly	Glu	Lys	Pro	Tyr	Gly	Cys	Ala	Asp	Cys	Gly	Arg	Arg	Phe	Ser
			85					90						95	
Gln	Ser	Ser	Ala	Leu	Tyr	Gln	His	Arg	Arg	Val	His	Ser	Gly	Glu	Thr
			100					105					110		
Pro	Phe	Pro	Cys	Pro	Asp	Cys	Gly	Arg	Ala	Phe	Ala	Tyr	Pro	Ser	Asp
		115					120					125			
Leu	Arg	Arg	His	Val	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Pro	Cys
	130					135					140				
Pro	Asp	Cys	Gly	Arg	Arg	Phe	Ser	Ser	Ser	Ser	Leu	Leu	Val	Ser	His

145                      150                      155                      160  
 Arg Arg Ala His Ser Gly Glu Cys Pro Tyr Val Cys Asp Gln Cys Gly  
                                  165                      170                      175  
 Lys Arg Phe Ser Gln Arg Lys Asn Leu Ser Gln His Gln Val Ile His  
                                  180                      185                      190  
 Thr Gly Glu Lys Pro Tyr His Cys Pro Asp Cys Gly Arg Cys Phe Arg  
                                  195                      200                      205  
 Arg Ser Arg Ser Leu Ala Asn His Arg Thr Thr His Thr Gly Glu Lys  
                                  210                      215                      220  
 Pro His Gln Cys Pro Ser Cys Gly Arg Arg Phe Ala Tyr Pro Ser Leu  
 225                                   230                                   235                                   240  
 Leu Ala Ser His Arg Arg Val His Ser Gly Glu Arg Pro Tyr Ala Cys  
                                  245                                   250                                   255  
 Asp Leu Cys Ser Lys Arg Phe Ala Gln Trp Ser His Leu Ala Gln His  
                                  260                                   265                                   270  
 Gln Leu Leu His Thr Gly Glu Lys Pro Phe Pro Cys Leu Glu Cys Gly  
                                  275                                   280                                   285  
 Arg Ala Ser Ala Arg Gly Gly Leu Trp Leu Ser Thr Ser Val Ala Pro  
                                  290                                   295                                   300  
 Arg Pro Gln Thr Val Ala Leu Asp  
 305                                   310

<210> 1899

<211> 508

<212> DNA

<213> Homo sapiens

<400> 1899

aaatttgccct ccctaattgg caaggtgcaa gccctggaac agcgcgacca gctgctggag  
 60  
 acacgctgga gcttcctgca gggccaggac tcagccatct tcgacctcgg gcattcttat  
 120  
 gaggaaatat caggccggct gcggagggaa ctgggcaaaa gggacaggaa ccgggggacg  
 180  
 ctggaggcca ccctgctgca ggtgttgaaa aaggtggagg agtttcgaat caggtattga  
 240  
 gatgagatct ccaagcgac agacatggag ttcaccttg ttcagctgaa gaaggacctg  
 300  
 gatgcagagt gtcttcatcg gactgaactg gaaaccaagt taaaaagcct ggagagcttc  
 360  
 gtggagttga tgaaaaccat ctatgagcag gagctgaagg acctggcagc acaggtgaag  
 420  
 gatgtgtcgg tgaccgtcgg catggacagc cgtgccaca tcgacctgag cggcatcgtg  
 480  
 gaggaggtga aggccagta tgacgccg  
 508

<210> 1900

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1900

Lys Phe Ala Ser Leu Ile Gly Lys Val Gln Ala Leu Glu Gln Arg Asp

```

      1           5           10           15
Gln Leu Leu Glu Thr Arg Trp Ser Phe Leu Gln Gly Gln Asp Ser Ala
      20           25           30
Ile Phe Asp Leu Gly His Leu Tyr Glu Glu Ile Ser Gly Arg Leu Arg
      35           40           45
Arg Glu Leu Gly Gln Arg Asp Arg Asn Arg Gly Gln Leu Glu Ala Thr
      50           55           60
Leu Leu Gln Val Leu Lys Lys Val Glu Glu Phe Arg Ile Arg Tyr
      65           70           75

```

&lt;210&gt; 1901

&lt;211&gt; 453

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1901

```

acgcgtggac cacgatgcgc cggatcgggc tcggcgccat gcacacctcg gacctggcgg
60
cgggtgttcgg cgatgcgaag gcaaccgcg cttccaagtt cgacccgttc cagccgcgcg
120
aggaattcga cgaggtcagc gccgccatgc agttccactg gggctccttc ttccacaacg
180
cgcatccggg cgagaagtgg ccggtctacg gtttccgcag cgacacggag cccggccgcg
240
cgaccgcgat cttcgcggcg aagtcctccg tggagtacga cccaaggcg gcgcagcgcc
300
gcgcgtggga gggctttgac atgcgcgaat ggggcatgca caggcaggac ctggtggaaa
360
cgctcaccca ttccatcgcc gacgagggca acgcttagcg acgccagcgc caccgagttt
420
agagaaatga aagaaatttt aatagagggg gga
453

```

&lt;210&gt; 1902

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1902

```

Thr Arg Gly Pro Arg Cys Ala Gly Ser Gly Ser Ala Pro Cys Thr Pro
      1           5           10           15
Arg Thr Trp Arg Arg Cys Ser Ala Met Arg Arg Gln Pro Ala Leu Pro
      20           25           30
Ser Ser Thr Arg Ser Ser Arg Ala Arg Asn Ser Thr Arg Ser Ala Pro
      35           40           45
Pro Cys Ser Ser Thr Gly Ala Pro Ser Ser Thr Thr Arg Ile Arg Ala
      50           55           60
Arg Ser Gly Arg Ser Thr Val Ser Ala Ala Thr Arg Ser Pro Ala Ala
      65           70           75           80
Arg Pro Arg Ser Ser Arg Arg Ser Pro Pro Trp Ser Thr Thr Pro Arg
      85           90           95
Arg Arg Ser Ala Ala Arg Gly Arg Ala Leu Thr Cys Ala Asn Gly Ala
      100          105          110
Cys Thr Gly Arg Thr Trp Trp Lys Arg Ser Pro Ile Pro Ser Pro Thr

```



115                      120                      125  
 Arg Ala Thr Leu Ser Asp Ala Ser Ala Thr Glu Phe Arg Glu Met Lys  
 130                      135                      140  
 Glu Ile Leu Ile Glu Gly Gly  
 145                      150

<210> 1903  
 <211> 531  
 <212> DNA  
 <213> Homo sapiens

<400> 1903  
 ccggcgaggg agctgttccg ggacgccgcc tccccgccg cggactcctc gctcttctgc  
 60  
 gacttgctta cgccgctggc ccagttccgc gaggacatca cgtggaggcg gccccagaga  
 120  
 atttggtcca acccccgctt gtttccaaat gaccaacggg aagggcaggt gaagcagggg  
 180  
 ctgctggggg attgctggtt cctgtgtgcc tgcgcgcgcg tgcagaagag caggcacctc  
 240  
 ctggaccagg tcattcctgc gggacagccg agctgggccg accaggagta ccggggctcc  
 300  
 ttcacctgtc gcttttggca gtttggacgg tgggtggagg gtccatgggt cccttcgagc  
 360  
 ccctgtgggc ggggcaggtg gcggatgccc tgggtggacct gaccggcggc ctggcagaaa  
 420  
 gatggaacct gaagggcgta gcaggaagcg gaggccagca ggacaggcca ggccgctggg  
 480  
 agcacaggac ttgtcggcag ctgctccacc tgaaggacca gtgtctgata a  
 531

<210> 1904  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 1904  
 Pro Ala Arg Glu Leu Phe Arg Asp Ala Ala Phe Pro Ala Ala Asp Ser  
 1                      5                      10                      15  
 Ser Leu Phe Cys Asp Leu Ser Thr Pro Leu Ala Gln Phe Arg Glu Asp  
 20                      25                      30  
 Ile Thr Trp Arg Arg Pro Gln Arg Ile Cys Ala Asn Pro Arg Leu Phe  
 35                      40                      45  
 Pro Asn Asp Gln Arg Glu Gly Gln Val Lys Gln Gly Leu Leu Gly Asp  
 50                      55                      60  
 Cys Trp Phe Leu Cys Ala Cys Ala Ala Leu Gln Lys Ser Arg His Leu  
 65                      70                      75                      80  
 Leu Asp Gln Val Ile Pro Ala Gly Gln Pro Ser Trp Ala Asp Gln Glu  
 85                      90                      95  
 Tyr Arg Gly Ser Phe Thr Cys Arg Phe Trp Gln Phe Gly Arg Trp Val  
 100                      105                      110  
 Glu Gly Pro Trp Val Pro Ser Ser Pro Cys Gly Arg Gly Arg Trp Arg  
 115                      120                      125  
 Met Pro Trp Trp Thr

130

&lt;210&gt; 1905

&lt;211&gt; 387

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1905

```

acgcgtgggc tgatcgccat gctctgggca ctgggggtgg tggcggaagt gctgatgttc
60
ctggccatga gccggatcct cgcgcgcttt tcggtccgtc ggggtgctgct ggccagtttc
120
ctcctggccg ccgtgcgctg gttgctgctg ggcgcgttgg ccgatcacct ggcggtgctg
180
ttgttcgccc aggtgctgca cgcggcgacc ttgcccagct ttcacgcctc tgccattcat
240
ttcgtgcaac gtagcttcgg cgcgcgcncg gcaaggccag ggcaggcgtt atacgctgca
300
ctggccggta cggggcgggc tttgggcgcg ttgtacgccg gttatagctg gaacagcctg
360
gggcgcacct ggactttcag catcggt
387

```

&lt;210&gt; 1906

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1906

```

Thr Arg Gly Leu Ile Gly Met Leu Trp Ala Leu Gly Val Val Ala Glu
 1           5           10           15
Val Leu Met Phe Leu Ala Met Ser Arg Ile Leu Ala Arg Phe Ser Val
      20           25           30
Arg Arg Val Leu Leu Ala Ser Phe Leu Leu Ala Ala Val Arg Trp Leu
      35           40           45
Leu Leu Gly Ala Leu Ala Asp His Leu Ala Val Leu Leu Phe Ala Gln
      50           55           60
Val Leu His Ala Ala Thr Phe Ala Ser Phe His Ala Ser Ala Ile His
      65           70           75           80
Phe Val Gln Arg Ser Phe Gly Ala Arg Xaa Ala Arg Pro Gly Gln Ala
      85           90           95
Leu Tyr Ala Ala Leu Ala Gly Thr Gly Gly Ala Leu Gly Ala Leu Tyr
      100          105          110
Ala Gly Tyr Ser Trp Asn Ser Leu Gly Pro Thr Trp Thr Phe Ser Ile
      115          120          125
Val

```

&lt;210&gt; 1907

&lt;211&gt; 333

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1907

acgcgttttcg accagcgcac ccgtgtcggc ggcatggcgg aaatcgtcgg cttcgacaag  
 60  
 aagctgcgcg ccgcgcgccg cgaaacgctc gagatgtgcg tcaacgacct gttcccgggc  
 120  
 ggccggcgaca cgtcgaaggc cactgtcttg acgggcctgc gcccgatgac gccggacggc  
 180  
 acgccgatcg tcggccgcac gccggtgtcg aacctgttcc tgaacaccgg ccacggcacg  
 240  
 ctccgctgga caatgggtgt cggctcgggc caactgtcgc ccgacctgat ctccgggcaag  
 300  
 atgccccgga tccaggccga cgacctgtct nnc  
 333

<210> 1908

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1908

Thr	Arg	Phe	Asp	Gln	Arg	Ile	Arg	Val	Gly	Gly	Met	Ala	Glu	Ile	Val
1				5					10					15	
Gly	Phe	Asp	Lys	Lys	Leu	Arg	Ala	Ala	Arg	Arg	Glu	Thr	Leu	Glu	Met
			20					25					30		
Cys	Val	Asn	Asp	Leu	Phe	Pro	Gly	Gly	Gly	Asp	Thr	Ser	Lys	Ala	Thr
		35					40					45			
Phe	Trp	Thr	Gly	Leu	Arg	Pro	Met	Thr	Pro	Asp	Gly	Thr	Pro	Ile	Val
	50					55				60					
Gly	Arg	Thr	Pro	Val	Ser	Asn	Leu	Phe	Leu	Asn	Thr	Gly	His	Gly	Thr
65				70					75					80	
Leu	Gly	Trp	Thr	Met	Val	Cys	Gly	Ser	Gly	Gln	Leu	Leu	Ala	Asp	Leu
			85					90						95	
Ile	Ser	Gly	Lys	Met	Pro	Ala	Ile	Gln	Ala	Asp	Asp	Leu	Ser	Xaa	
			100					105						110	

<210> 1909

<211> 2767

<212> DNA

<213> Homo sapiens

<400> 1909

ngactgccgg tcgttcggac gtcttgctcg tcgcgtggag gagaggtcgg ggctctccag  
 60  
 gaaggtggct gcggcgacaa aatgaagata ttcgtgggca acgtcgacgg ggccgatacg  
 120  
 actccggagg agctggcagc cctcttttgcg ccctacggca cggtcacgag ctgcgccgtc  
 180  
 atgaaacagt tcgccttcgt gcacatgcgc gagaacgcgg gcgcgctgcg cgccatcgaa  
 240  
 gccctgcacg gccacgagct gcggccgggg cgcgcgctcg tgggtggaaat gtcgcgcccc  
 300  
 aggcctctta atacttgga gattttctgt ggcaatgtgt cggctgcatg cacgagccag  
 360  
 gaactgcgca gcctcttcga gcgcgcgga cgcgtcatcg agtgtgacgt ggtgaaagac  
 420

tacgcgtttg ttcacatgga gaaggaagca gatgccaaag cgcgaatcgc gcagctcaac  
480  
ggcaaagaag tgaagggaag ggcacatcaac gtggaactct ccaccaaggg tcagaagaag  
540  
gggcctggcc tggctgtcca gtctggggac aagaccaaga aaccaggggc tggggatacg  
600  
gccttccctg gaactggtgg cttctctgcc accttcgact accagcaggc ttttggaac  
660  
agcactggtg gctttgatgg gcaagcccg t cagccacac cacccttctt tggtcgcgac  
720  
cgcagccctc tgcgcggtc acctccccga gcctcttatg tggtcctct gacggcccg  
780  
ccagctacct accgggcccc ggcgtccgtg t cactgggag ctgcctacag ggcccagcct  
840  
tctgcctctt tgggtgttgg ctatcggaact cagcccatga cagccaggc agcctcttac  
900  
cgcgctcagc cctctgtct ccttggggca ccatacaggg gccagctggc tagtcctagc  
960  
tcccagtctg ctgcagcttc ttcactggc ccatagttg gagccagcc ctgcagctcg  
1020  
gccctttcct cctatggggg tcaggcagct gcagcttctt cgctcaactc ctatggggct  
1080  
cagggttctt ccttgcctc ctatggtaac cagccatctt cttacgggc ccaggctgcc  
1140  
tcttctatg ggggtctgac agctgcttct tctacaaca cccagggagc agcttctctc  
1200  
ttaggctcct acggggctca ggcagcctcc tatggggccc agtctgcagc ctctcacta  
1260  
gcttatggag cccaggcagc ttcataaat gccagccct cggcctctta caatgccag  
1320  
tctgccccat atgctgcaca gcaggctgct tctactctt cccaacctgc tgcctatgtg  
1380  
gcacagccag ccacagctgc tgcctatgcc agccagccag cagcctacgc cgcacaagcc  
1440  
actaccccaa tggctggctc ctatggggc cagccggtt tgcagacca gctgaatagt  
1500  
tacggggccc aagcatcaat gggcctttca ggctcctatg gggctcagtc ggctgctgag  
1560  
gccactggct cctatggtgc cgcagcagcc tacggggccc aaccttctgc cactctggca  
1620  
gtccttacc gactcagtc atcagcctca ttggctgctt cctatgctgc ccagcagcat  
1680  
cccaggtg ctgcctccta ccgcggccag ccaggcaatg cctacgatgg ggcaggctag  
1740  
cgtctgcag cctacctgc catgtcccag ggggccgtt ccaacgcaa cagcaccgc  
1800  
ccgccctatg agcgtaccg cctctccca cccgggcca gctacgacga tccctacaaa  
1860  
aaggctgtc ccatgtcga aaggtatggt tccgaccgc gtttagccga gctctctgat  
1920  
taccgctgt tatcagatc gcagcttctg tccgcgct cgcgacaaa gtctcgtg  
1980  
gattaccgtc gcctgcccga tgcctatcc gattacgcac gctattcggg ctctataat  
2040

gattacctgc gggcggtcca gatgcactct ggctaccagc gccgcatgta gggccatcct  
 2100  
 gggatggggc accacagggg gggagggaga aaagaggtgg gtaggggttac agatccaggt  
 2160  
 tataactact ctggcccata cctttcctgg ttgtggtttt tcatgccttc taccatgtgg  
 2220  
 gccttcccca ggagatgac ctgttaagtg ttcggcagta acctactttg ttccttcgcc  
 2280  
 tcagcagcaa atcttgctac tggctctaga tctgcggttt cccctctacc ctgcctcctg  
 2340  
 tctcccccaga atgggaattt cttttatggt tttatttttt tcttggtccc cttttatttt  
 2400  
 tgtgcgcat atttaaggtc gtctggatgg ggaagcaacc tgcagctgag gtcgccggcg  
 2460  
 cctttttctt tttagatggg aaggaggcca ggaaagggtc agcttaacca tttcctatgt  
 2520  
 gccaaagctgt gccagcagtc cagggtaccc tgactgtccc tctgtagact gttgagactg  
 2580  
 agttcctggt gggacagtca gttggtatgt atccaagtcc ctgctgacca ctaatgttct  
 2640  
 agctgatggg gagcggcaca gtcccacttc cccatctccc caagtaggtg gtgtagaaa  
 2700  
 accttaattt tttttccctt ttgtatggac tacaaataaa acttggggca atttgcagt  
 2760  
 tggaaaa  
 2767

&lt;210&gt; 1910

&lt;211&gt; 669

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1910

Met	Lys	Ile	Phe	Val	Gly	Asn	Val	Asp	Gly	Ala	Asp	Thr	Thr	Pro	Glu
1				5					10					15	
Glu	Leu	Ala	Ala	Leu	Phe	Ala	Pro	Tyr	Gly	Thr	Val	Met	Ser	Cys	Ala
			20					25					30		
Val	Met	Lys	Gln	Phe	Ala	Phe	Val	His	Met	Arg	Glu	Asn	Ala	Gly	Ala
		35					40					45			
Leu	Arg	Ala	Ile	Glu	Ala	Leu	His	Gly	His	Glu	Leu	Arg	Pro	Gly	Arg
	50					55					60				
Ala	Leu	Val	Val	Glu	Met	Ser	Arg	Pro	Arg	Pro	Leu	Asn	Thr	Trp	Lys
65					70					75				80	
Ile	Phe	Val	Gly	Asn	Val	Ser	Ala	Ala	Cys	Thr	Ser	Gln	Glu	Leu	Arg
				85					90					95	
Ser	Leu	Phe	Glu	Arg	Arg	Gly	Arg	Val	Ile	Glu	Cys	Asp	Val	Val	Lys
			100					105					110		
Asp	Tyr	Ala	Phe	Val	His	Met	Glu	Lys	Glu	Ala	Asp	Ala	Lys	Ala	Ala
		115					120					125			
Ile	Ala	Gln	Leu	Asn	Gly	Lys	Glu	Val	Lys	Gly	Lys	Arg	Ile	Asn	Val
	130					135						140			
Glu	Leu	Ser	Thr	Lys	Gly	Gln	Lys	Lys	Gly	Pro	Gly	Leu	Ala	Val	Gln
145					150					155				160	
Ser	Gly	Asp	Lys	Thr	Lys	Lys	Pro	Gly	Ala	Gly	Asp	Thr	Ala	Phe	Pro

					165					170					175	
Gly	Thr	Gly	Gly	Phe	Ser	Ala	Thr	Phe	Asp	Tyr	Gln	Gln	Ala	Phe	Gly	
			180					185					190			
Asn	Ser	Thr	Gly	Gly	Phe	Asp	Gly	Gln	Ala	Arg	Gln	Pro	Thr	Pro	Pro	
			195				200					205				
Phe	Phe	Gly	Arg	Asp	Arg	Ser	Pro	Leu	Arg	Arg	Ser	Pro	Pro	Arg	Ala	
	210					215					220					
Ser	Tyr	Val	Ala	Pro	Leu	Thr	Ala	Gln	Pro	Ala	Thr	Tyr	Arg	Ala	Gln	
225					230					235					240	
Pro	Ser	Val	Ser	Leu	Gly	Ala	Ala	Tyr	Arg	Ala	Gln	Pro	Ser	Ala	Ser	
				245					250					255		
Leu	Gly	Val	Gly	Tyr	Arg	Thr	Gln	Pro	Met	Thr	Ala	Gln	Ala	Ala	Ser	
			260					265					270			
Tyr	Arg	Ala	Gln	Pro	Ser	Val	Ser	Leu	Gly	Ala	Pro	Tyr	Arg	Gly	Gln	
		275					280					285				
Leu	Ala	Ser	Pro	Ser	Ser	Gln	Ser	Ala	Ala	Ala	Ser	Ser	Leu	Gly	Pro	
	290					295					300					
Tyr	Gly	Gly	Ala	Gln	Pro	Ser	Ala	Ser	Ala	Leu	Ser	Ser	Tyr	Gly	Gly	
305					310					315					320	
Gln	Ala	Ala	Ala	Ala	Ser	Ser	Leu	Asn	Ser	Tyr	Gly	Ala	Gln	Gly	Ser	
				325					330					335		
Ser	Leu	Ala	Ser	Tyr	Gly	Asn	Gln	Pro	Ser	Ser	Tyr	Gly	Ala	Gln	Ala	
			340					345					350			
Ala	Ser	Ser	Tyr	Gly	Val	Arg	Ala	Ala	Ala	Ser	Ser	Tyr	Asn	Thr	Gln	
		355					360					365				
Gly	Ala	Ala	Ser	Ser	Leu	Gly	Ser	Tyr	Gly	Ala	Gln	Ala	Ala	Ser	Tyr	
	370					375					380					
Gly	Ala	Gln	Ser	Ala	Ala	Ser	Ser	Leu	Ala	Tyr	Gly	Ala	Gln	Ala	Ala	
385					390					395					400	
Ser	Tyr	Asn	Ala	Gln	Pro	Ser	Ala	Ser	Tyr	Asn	Ala	Gln	Ser	Ala	Pro	
				405					410					415		
Tyr	Ala	Ala	Gln	Gln	Ala	Ala	Ser	Tyr	Ser	Ser	Gln	Pro	Ala	Ala	Tyr	
			420					425					430			
Val	Ala	Gln	Pro	Ala	Thr	Ala	Ala	Ala	Tyr	Ala	Ser	Gln	Pro	Ala	Ala	
		435					440					445				
Tyr	Ala	Ala	Gln	Ala	Thr	Thr	Pro	Met	Ala	Gly	Ser	Tyr	Gly	Ala	Gln	
	450					455					460					
Pro	Val	Val	Gln	Thr	Gln	Leu	Asn	Ser	Tyr	Gly	Ala	Gln	Ala	Ser	Met	
465					470					475					480	
Gly	Leu	Ser	Gly	Ser	Tyr	Gly	Ala	Gln	Ser	Ala	Ala	Ala	Ala	Thr	Gly	
				485					490					495		
Ser	Tyr	Gly	Ala	Ala	Ala	Ala	Tyr	Gly	Ala	Gln	Pro	Ser	Ala	Thr	Leu	
			500													

```

      595              600              605
Ala Glu Leu Ser Asp Tyr Arg Arg Leu Ser Glu Ser Gln Leu Ser Phe
  610              615              620
Arg Arg Ser Pro Thr Lys Ser Ser Leu Asp Tyr Arg Arg Leu Pro Asp
  625              630              635              640
Ala His Ser Asp Tyr Ala Arg Tyr Ser Gly Ser Tyr Asn Asp Tyr Leu
      645              650              655
Arg Ala Ala Gln Met His Ser Gly Tyr Gln Arg Arg Met
      660              665

```

&lt;210&gt; 1911

&lt;211&gt; 339

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1911

```

ncggggtggc cggaatctac tctagtgtc cagcttcctt cctcttctgt cttccctcg
60
ggtgcgcgga tgcgtttgcg cccctgctg cgttccgacg gtcattgagtg gcggcgctcag
120
cgcattcgacg atgaaagctt cctccgccca gttgagccga cccaagccgc accgtgggagc
180
gcagcgcata gccagcaggc gtggtggaat cacctgaagt acctgcgcac cgccgcgcgt
240
gaagcactgg tgggtccgct cgtcattgag gtggagggga aattcgcagg gcaggtaacc
300
ctgggaaaca ttcagcatgg cagcattcgc gattgctgg
339

```

&lt;210&gt; 1912

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1912

```

Xaa Gly Trp Pro Glu Ser Thr Pro Ser Val Gln Leu Pro Ser Ser Ser
  1              5              10              15
Val Phe Pro Ser Gly Ala Arg Met Arg Leu Arg Pro Leu Leu Arg Ser
      20              25              30
Asp Gly His Glu Trp Arg Arg Gln Arg Ile Asp Asp Glu Ser Phe Leu
      35              40              45
Arg Pro Val Glu Pro Thr Gln Ala Ala Pro Trp Ala Ala Ala His Ser
      50              55              60
Gln Gln Ala Trp Trp Asn His Leu Lys Tyr Leu Arg Thr Ala Ala Arg
      65              70              75              80
Glu Ala Leu Val Val Pro Leu Val Ile Glu Val Glu Gly Lys Phe Ala
      85              90              95
Gly Gln Val Thr Leu Gly Asn Ile Gln His Gly Ser Ile Arg Asp Cys
      100              105              110
Trp

```

&lt;210&gt; 1913

&lt;211&gt; 767

<212> DNA  
 <213> Homo sapiens

<400> 1913  
 gtgcacaccg gttcacagcg atatttcagg caaattgaaa gcgtcagttc gataggctga  
 60  
 atgcgaaatg ggggatttgt caccctcagg gaccggaagg aaggagcag tccgatggca  
 120  
 gcgcagttac tcgatctcgt cctcccagcc ttgtccgaaa cctccgcca tctcatcggc  
 180  
 cagaggttgc gccagggatg tcacacctcc atccccacat cgaatctacg gtgagcttcg  
 240  
 tcccagctgt cgggcagttac aaggcacctc ggatcaagct ttcttggtc gaactggtcc  
 300  
 tggtagccat caatgccacc cacctgcact ccaatcccc acaagttgtc caacacgccg  
 360  
 cagaattcgc tcgcagccac ccggaccttg ccatcaaggt ggcccgcacc accggaccag  
 420  
 caccggtcct cctcaacctc gtcgatacgc gattgcgtct ggcagctcat cgcgtccatg  
 480  
 cccaggagct ggactcactc gtattgtctt cccctgatgg cggcgattta cgtggctcgg  
 540  
 caatgctgtc caggetgacc cggctgtggt cccagcacca ccaccttcg gtccgcatcg  
 600  
 ccaccaatcg tggtaggggt actgcggtcg aggaggtcgt cggccgctg cgacaggagg  
 660  
 ggcgcgtca tatcgcatg ggaagcctgt ggatttgcga cgacgagaat ttccgcatc  
 720  
 atactcgcca ggctttgcat gccggtgccc aggttgctgc cgcaccg  
 767

<210> 1914  
 <211> 190  
 <212> PRT  
 <213> Homo sapiens

<400> 1914  
 Met Ser His Leu His Pro His Ile Glu Ser Thr Val Ser Phe Val Pro  
 1 5 10 15  
 Ala Val Gly Gln Tyr Lys Ala Pro Arg Ile Lys Leu Ser Trp Arg Glu  
 20 25 30  
 Leu Val Leu Val Pro Ile Asn Ala Thr His Leu His Ser Asn Pro Pro  
 35 40 45  
 Gln Val Val Gln His Ala Ala Glu Leu Arg Arg Ser His Pro Asp Leu  
 50 55 60  
 Ala Ile Lys Val Ala Arg Pro Thr Gly Pro Ala Pro Val Leu Leu Asn  
 65 70 75 80  
 Leu Val Asp Thr Arg Leu Arg Leu Ala Ala His Arg Val His Ala Gln  
 85 90 95  
 Glu Leu Asp Ser Leu Val Leu Ser Ser Pro Asp Gly Gly Asp Leu Arg  
 100 105 110  
 Gly Ser Ala Met Leu Ser Arg Leu Thr Arg Leu Trp Ser Gln His His  
 115 120 125  
 His Leu Pro Val Arg Ile Ala Thr Asn Arg Gly Gly Ala Thr Ala Val



130	135	140
Glu Glu Val Val Ala Arg	Leu Arg Gln Glu Gly Arg Arg His Ile Ala	
145	150	155
Val Gly Ser Leu Trp Ile Cys Asp Asp	Glu Asn Phe Arg Ile His Thr	160
	165	170
Arg Gln Ala Leu His Ala Gly Ala	Glu Val Val Ala Ala Pro	175
	180	185
		190

&lt;210&gt; 1915

&lt;211&gt; 571

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1915

```

acgcgtccca ggccccacag gccccctctg gctctcaggc cccccgcca gtggccagga
60
aggtgtgagc gcacgatggg cagtcacgcc gcacacacgc tctgctcatg tccctcccca
120
ggaccctctg accgggcaca agggcagctg tgaggacaag gccacagcca caaaccaacc
180
tggcacacac ggctcagggc gaggcactgc cccatggggc tgcattgatcc acgctcacag
240
gtgtcattgt ctatgctcag gggggcttgg caccatggga aaccaccca gaacacatgg
300
agaagccaca gcacaacctc agcgcccgcc atgcaggacc ctgggtctca cccattgcac
360
ccaccgtgcg ggaccctcgc gcctcaccgc gaacatccac agtgtgggac tgctgcgtct
420
caccactgc acctgccgtg caggatccct gagtctcacc cgccgcaccc gccgtgcggg
480
atccctgagt ctaccccgcc gcaccgcgcg tacctgccgc atccgccatg cgggaccctt
540
gcgtctcacc caccgcaccc gccgtgcggg a
571

```

&lt;210&gt; 1916

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1916

Met Gly Leu His Asp Pro Arg Ser Gln Val Ser Leu Ser Met Leu Arg	
1 5 10 15	
Gly Ala Trp His His Gly Lys Pro Thr Gln Asn Thr Trp Arg Ser His	
20 25 30	
Ser Thr Thr Ser Ala Pro Ala Met Gln Asp Pro Gly Ser His Pro Leu	
35 40 45	
His Pro Pro Cys Gly Thr Pro Ala Pro His Pro Glu His Pro Gln Cys	
50 55 60	
Gly Thr Ala Ala Ser His Pro Leu His Leu Pro Cys Arg Ile Pro Glu	
65 70 75 80	
Ser His Pro Pro His Pro Pro Cys Gly Ile Pro Glu Ser His Pro Pro	
85 90 95	
His Pro Pro Tyr Leu Pro His Pro Pro Cys Gly Thr Pro Ala Ser His	

100  
Pro Pro His Pro Pro Cys Gly  
115

105

110

<210> 1917  
<211> 360  
<212> DNA  
<213> Homo sapiens

<400> 1917  
nnacgcgtga ccggcgaaga tctccgcacc ctatctgccg ggtacacgcc gggtgattcc  
60  
gatatgtctt gggctgccat caccttgtgg cgcggtgtcg ttgcctccgc cttggaccgt  
120  
catccctatg gcccggtgaa gtcggttaaag gtagcaggtc cggccggcca cccagccccg  
180  
gatttcgccg ccggatggtt gtcgaccgc ttggcagttc ccgtacatcg cacagtggcc  
240  
gactcccaaa ggagacactt cccggtgact catttgcagt tcaatcggga gacaaccac  
300  
gtagacgtcg atgtcattga cgagcgcacg gttcgtgtat gtgttccggg ttcgccggaa  
360

<210> 1918  
<211> 120  
<212> PRT  
<213> Homo sapiens

<400> 1918  
Xaa Arg Val Thr Gly Glu Asp Leu Arg Thr Leu Ser Ala Gly Tyr Thr  
1 5 10 15  
Pro Gly Asp Ser Asp Met Ser Trp Ala Ala Ile Thr Leu Trp Arg Gly  
20 25 30  
Val Val Ala Ser Ala Leu Asp Arg His Pro Tyr Gly Pro Val Lys Ser  
35 40 45  
Val Lys Val Ala Gly Pro Ala Gly His Pro Ala Pro Asp Phe Ala Ala  
50 55 60  
Gly Trp Leu Leu Asp Arg Leu Ala Val Pro Val His Arg Thr Val Ala  
65 70 75 80  
Asp Ser Pro Arg Arg His Phe Pro Val Thr His Leu Gln Phe Asn Arg  
85 90 95  
Glu Thr Thr His Val Asp Val Asp Val Ile Asp Glu Arg Thr Val Arg  
100 105 110  
Val Cys Val Pro Gly Ser Pro Glu  
115 120

<210> 1919  
<211> 354  
<212> DNA  
<213> Homo sapiens

<400> 1919  
nncggcgca gctgtgtcca ctgcgtgtc cctgccacct cggccatctg cctctctctt  
60

ccaggctgca gccatccctc ctgcactgct gaggcctggc cagcgcatc ncggccacgc  
 120  
 ccacctccat cctctttgcc cttactaaa cactgggagc ccgcccggcc gcgacaggcc  
 180  
 aggccagcgg gaaggtgtag acgaacagcc caaaggattc agcagtgtaa gtaccccacc  
 240  
 tacgcactta caaagtgcag gccaccggcc agccccacct ccagacacag gcggaggcca  
 300  
 agctcggggg caccgtatca tcccgtgccg tctccaccct acccctgcca attg  
 354

<210> 1920

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1920

Xaa	Gly	Arg	Ser	Cys	Val	His	Cys	Ala	Val	Pro	Ala	Thr	Ser	Ala	Ile
1				5					10					15	
Cys	Leu	Ser	Leu	Pro	Gly	Cys	Ser	His	Pro	Ser	Cys	Thr	Ala	Glu	Ala
			20					25					30		
Trp	Pro	Arg	Ala	Ser	Arg	Pro	Arg	Pro	Pro	Pro	Ser	Ser	Leu	Pro	Leu
		35					40					45			
Thr	Lys	His	Trp	Glu	Pro	Ala	Arg	Pro	Arg	Gln	Ala	Arg	Pro	Ala	Gly
	50					55					60				
Arg	Cys	Arg	Arg	Thr	Ala	Gln	Arg	Ile	Gln	Gln	Cys	Lys	Tyr	Pro	Thr
65					70					75				80	
Tyr	Ala	Leu	Thr	Lys	Cys	Arg	Pro	Pro	Pro	Ser	Pro	Thr	Ser	Arg	His
				85					90					95	
Arg	Arg	Arg	Pro	Ser	Ser	Arg	Ala	Pro	Tyr	His	Pro	Val	Pro	Ser	Pro
			100					105					110		
Pro	Tyr	Pro	Cys	Gln	Leu										
															115

<210> 1921

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1921

gaattcatct ggaggcagag agatggggaa gcgggtggga gaagagcaag aacggaaact  
 60  
 atttttaata caaatccagt catggtattg tatacacagc agcctctgtc ttccagaaac  
 120  
 ctacacggcc gccacaccaa agttaatgcc accaggcgtc atcacacaga tgtgagggtgc  
 180  
 aggtgccact ccacagccgt gggcagacct gggagcccag ctctctctgg ttccaccctc  
 240  
 cacactgccc accccatcct tctctcccag tctccactcc atcgaagcct ccagatgac  
 300  
 ttcatgtggg gacaggagaa ctacagatca tggctgagaa gggcgcnctg tngtcca  
 357

<210> 1922

<211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 1922  
 Met Val Leu Tyr Thr Gln Gln Pro Leu Ser Ser Arg Asn Leu His Gly  
 1 5 10 15  
 Arg His Thr Lys Val Asn Ala Thr Arg Arg His His Thr Asp Val Arg  
 20 25 30  
 Cys Arg Cys His Ser Thr Ala Val Gly Arg Pro Gly Ser Pro Ala Pro  
 35 40 45  
 Pro Gly Phe Thr Leu His Thr Ala His Pro Ile Leu Leu Ser Gln Ser  
 50 55 60  
 Pro Leu His Arg Ser Leu Pro Asp Asp Phe Met Trp Gly Gln Glu Asn  
 65 70 75 80  
 Tyr Arg Ser Trp Leu Arg Arg Ala Xaa Cys Xaa Pro  
 85 90

<210> 1923  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

<400> 1923  
 nattnaatta tgggtgagaaa aggcttatgc gttgcattgc tcgtgcttgt cacactgtca  
 60  
 ggtagtgcac agaagaaaga atggttcagc aacattaaac tctcaggcta tggaatgacc  
 120  
 cagtatcaat atactgatca agaggggaagc aaaggccatt catttaatatc gcgattgttc  
 180  
 ccgttgccctt taaacggacg tatcttaaata gacttttatt ggaaggcaca ggcccaattc  
 240  
 aatggaaaca catcgacatt gggaagcagt ccacgtcttg tagacctatt tgtagagtgg  
 300  
 cagaaatatg attatttcaa ggtgaagtta ggccagttta agcgaccatt cacgtttgaa  
 360  
 aatcccag  
 368

<210> 1924  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1924  
 Met Val Arg Lys Gly Leu Cys Val Ala Leu Leu Val Leu Val Thr Leu  
 1 5 10 15  
 Ser Gly Ser Ala Gln Lys Lys Glu Trp Phe Ser Asn Ile Lys Leu Ser  
 20 25 30  
 Gly Tyr Gly Met Thr Gln Tyr Gln Tyr Thr Asp Gln Glu Gly Ser Lys  
 35 40 45  
 Gly His Ser Phe Asn Leu Arg Leu Phe Pro Leu Pro Leu Asn Gly Arg  
 50 55 60  
 Ile Leu Asn Asp Phe Tyr Trp Lys Ala Gln Ala Gln Phe Asn Gly Asn

```

65              70              75              80
Thr Ser Thr Leu Gly Ser Ser Pro Arg Leu Val Asp Leu Phe Val Glu
      85              90              95
Trp Gln Lys Tyr Asp Tyr Phe Lys Val Lys Leu Gly Gln Phe Lys Arg
      100              105              110
Pro Phe Thr Phe Glu Asn Pro
      115

```

&lt;210&gt; 1925

&lt;211&gt; 427

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1925

```

actagtgttt ccagcaggca gcgatttaat tgttcttgca ttgaaaccca gtgtggcaag
60
ccccctgtg atttgaggct aatccctccc caccctgttc tggcacatgt gcggtgccca
120
gggctcccc caggctgtga gcagataaag ccctgcgtgg cttcacaaca gtgactgggtt
180
ctgagaaaca ggtccttgta caagcgacag ggagtgtcca caccagatgt ggcagccctt
240
ccacgccagg ctgtgtggtg cagccgcctg gtatatgtgt ccatcgctga tgaaaacagc
300
gttgtgtggt gcatgactgt tgtctgtttt cttcatggaa acaaggaaac ctaagcatta
360
aaacaacacc atccacgtct ggttccttag agcaaatgga agcaccaggc tctggtgcac
420
ggcgcgc
427

```

&lt;210&gt; 1926

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1926

```

Met His His Thr Thr Leu Phe Ser Ser Ala Met Asp Thr Tyr Thr Arg
 1              5              10              15
Arg Leu His His Thr Ala Trp Arg Gly Gly Ala Ala Thr Ser Gly Val
      20              25              30
Ser Thr Pro Cys Arg Leu Tyr Lys Asp Leu Phe Leu Arg Thr Ser His
      35              40              45
Cys Cys Glu Ala Thr Gln Gly Phe Ile Cys Ser Gln Pro Gly Gly Ser
      50              55              60
Pro Gly His Arg Thr Cys Ala Arg Thr Gly Trp Gly Gly Ile Ser Leu
65              70              75              80
Lys Ser Gln Gly Gly Leu Pro His Trp Val Ser Met Gln Glu Gln Leu
      85              90              95
Asn Arg Cys Leu Leu Glu Thr Leu
      100

```

&lt;210&gt; 1927

&lt;211&gt; 516

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1927

```

nntctagaag actccaccta cttttcccca gactttcagc tctattctgg gaggcataaa
60
acatctgctt tgacggtgga ggcaaccagt agcatcaggg aaaaagttgt tgaagatcct
120
ctttgtaact tccactcccc aaacttcctg aggatctcag aggtggaaat gagaggttcc
180
gaggatgagg cagctggaac agtattgcag cggctgatcc aggaacaact gcggtatggc
240
acccaaccg agaacatgaa cttgctggcc attcagcacc aggcacaggg gaggcagga
300
ccagcccatc ctacaaacaa cttttcttcc acggaaaacc tcactcaaga agaccacaa
360
atggtctacc agtcagcagc ccaagaaccg cagggtcaag aacaccagng tgganncaat
420
acggtgatgg agaaacaggt cgggtccacg cagcctcagc agaacaacga ggaactgccc
480
acttacgagg aggcacaagc acagcccttc acgcgt
516

```

&lt;210&gt; 1928

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1928

```

Xaa Leu Glu Asp Ser Thr Tyr Phe Ser Pro Asp Phe Gln Leu Tyr Ser
1      5      10      15
Gly Arg His Glu Thr Ser Ala Leu Thr Val Glu Ala Thr Ser Ser Ile
20     25     30
Arg Glu Lys Val Val Glu Asp Pro Leu Cys Asn Phe His Ser Pro Asn
35     40     45
Phe Leu Arg Ile Ser Glu Val Glu Met Arg Gly Ser Glu Asp Ala Ala
50     55     60
Ala Gly Thr Val Leu Gln Arg Leu Ile Gln Glu Gln Leu Arg Tyr Gly
65     70     75     80
Thr Pro Thr Glu Asn Met Asn Leu Leu Ala Ile Gln His Gln Ala Thr
85     90     95
Gly Ser Ala Gly Pro Ala His Pro Thr Asn Asn Phe Ser Ser Thr Glu
100    105    110
Asn Leu Thr Gln Glu Asp Pro Gln Met Val Tyr Gln Ser Ala Arg Gln
115    120    125
Glu Pro Gln Gly Gln Glu His Gln Xaa Gly Xaa Asn Thr Val Met Glu
130    135    140
Lys Gln Val Arg Ser Thr Gln Pro Gln Gln Asn Asn Glu Glu Leu Pro
145    150    155    160
Thr Tyr Glu Glu Ala Lys Ala Gln Pro Phe Thr Arg
165    170

```

&lt;210&gt; 1929

&lt;211&gt; 843

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1929

```

nnccgcgggac actcaggggc tgggggtccct cttecccaag aggcctgact gcctgggtgt
60
tctccaggta catgtccttc aaggagaaat acacttcttg gcctggggct gggccagggg
120
ccttctgggc cttgtctgga gtgcccacag cagaggctgg cttectggta ctatctgtgc
180
cagaggaccc agggccccgt gcagccctgc ctctgggctg ggtctgaacc tgctccacgc
240
ccacgggccc ctgagtccca caggagtcag gctcgtctga gctggggatg cagttttctg
300
aagaacggcg gctttgggct gccttctcta actctggctt ccgcaccttg cttggattcc
360
tcacttttct tttcttctt ggccccactc tctctttga gggctctctg agggcccagc
420
tccatggcgt cacagatgta tgtcagcaag ccatgctctc cgtcctctcc attctcgggg
480
gcagcctccc cgttggtggt cacttctcca gaagcaaact gttgatcagg cccaaacctg
540
agtctgagc agtctcagtc tctccctcct gccaaagccgc cagggtccca ccctcaggct
600
ccctggtagg gaccgagggg cccggcgctt gagccccgct caatcgccgc tttcgtgga
660
agcggtcggg gctgagcttg cgcagagtgt cgacctcccc aggcaccgcc ttctcgtgct
720
tccagctctg ctcgatctcg cgcagctttg ccgcagcctt gcgcttcaac ttggcgaacc
780
agcgtggtg gatcttgtac tcagtcatgg tgcccacctc ccaggaccct gagcaggaca
840
caa
843

```

&lt;210&gt; 1930

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1930

```

Leu Pro Gly Cys Ser Pro Gly Thr Cys Pro Ser Arg Arg Asn Thr Leu
1           5           10           15
Pro Gly Leu Gly Leu Gly Gln Gly Pro Ser Gly Pro Cys Leu Glu Cys
20           25           30
Pro Gln Gln Arg Leu Ala Ser Trp Tyr Tyr Leu Cys Gln Arg Thr Gln
35           40           45
Ala Pro Val Gln Pro Cys Leu Trp Ala Gly Ser Glu Pro Ala Pro Arg
50           55           60
Pro Arg Ala Pro Glu Ser His Arg Ser Gln Ala Arg Leu Ser Trp Gly
65           70           75           80
Cys Ser Phe Leu Lys Asn Gly Gly Phe Gly Leu Pro Ser Leu Thr Leu
85           90           95
Ala Ser Ala Pro Cys Leu Asp Ser Ser Ser Phe Phe Phe Phe Leu Ala

```

100 105 110  
 Pro Leu Ser Ser Leu Arg Ala Leu  
 115 120  
 <210> 1931  
 <211> 719  
 <212> DNA  
 <213> Homo sapiens  
 <400> 1931  
 acgcgtaggc ctgagccgct ccacagccct ggggagggca gaaaaggagg aaagtaggca  
 60  
 gtgcaagaaa caggaggaaa cccccagag cgcagcctcc tgggaagcga agggagcact  
 120  
 gaagaggagg tggtagtggt tgtcagaagc tgctgagaag ccagttagat aaagcggaga  
 180  
 agcttcctac taggacagct tcctcccagc ccagtgtggc cacgctgggtg tcctcgggtga  
 240  
 ccagacacgt ggccatgaat ttctcagtgt gctttattgt tgattaaatg cagtcgggtc  
 300  
 acgaggctga ctttggaac aggaggtccg tgggtcgtgg aataagaaaag ggcacatcgg  
 360  
 ttgcagagga agggaaggaa gcccacggct gccttgggga gctttctgaa aggcagggtc  
 420  
 gatcatgcct ctctgggcta cgggtctctc acggtgggtc ctggttgga ctgaagtgg  
 480  
 ccccttggtc cctctctccc atctcagcat tagccaggac ttttggttg gcggccccag  
 540  
 cagggtgccc cccttgcaac acttcttttc ccacatgac gtgccttcca aacctacttc  
 600  
 cagcgtcgcc ctcttcaggg agcctttcat aaccacctct ccctccact ggctaagat  
 660  
 gaggttgagc aactgcagga cttgggaact tgttcctgcc cctgtggctg cctggatcc  
 719

<210> 1932  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1932  
 Met Pro Leu Trp Ala Thr Val Ser Ser Arg Trp Leu Leu Val Gly Thr  
 1 5 10 15  
 Glu Val Val Pro Leu Val Pro Leu Ser His Leu Ser Ile Ser Gln Asp  
 20 25 30  
 Phe Trp Leu Gly Gly Pro Ser Arg Ala Ala Pro Leu Gln His Phe Phe  
 35 40 45  
 Ser His Met Ile Val Pro Ser Lys Pro Thr Ser Ser Val Ala Leu Phe  
 50 55 60  
 Arg Glu Pro Phe Ile Thr Thr Ser Pro Phe His Trp Leu Lys Met Arg  
 65 70 75 80  
 Leu Ser Asn Cys Arg Thr Trp Asp Leu Val Pro Ala Pro Val Ala Ala  
 85 90 95  
 Trp Ile



<210> 1933  
 <211> 295  
 <212> DNA  
 <213> Homo sapiens

<400> 1933  
 ggcgccgagc tgtgggcggc catggagcgc atgcctgccg acctgattat cctcgacctg  
 60  
 atgctgccgg gggataacgg cctcttgctg tgccagcgcc tgcgccagca atacgaaca  
 120  
 ccagtgatca tgctgaccgc catgggcgaa ctgagtgtgc gcgtgggggg cctggaaatg  
 180  
 ggcgccgatg actacctgaa caaacctttc gatgcccggtg aattacttgc ccgggtgcgc  
 240  
 gctgtactgc gtccggcggtg tgaaaaccga ccgacgttgg gcgacgtgtc gcgcc  
 295

<210> 1934  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1934  
 Gly Ala Glu Leu Trp Ala Ala Met Glu Arg Met Pro Ala Asp Leu Ile  
 1 5 10 15  
 Ile Leu Asp Leu Met Leu Pro Gly Asp Asn Gly Leu Leu Leu Cys Gln  
 20 25 30  
 Arg Leu Arg Gln Gln Tyr Ala Thr Pro Val Ile Met Leu Thr Ala Met  
 35 40 45  
 Gly Glu Leu Ser Asp Arg Val Gly Gly Leu Glu Met Gly Ala Asp Asp  
 50 55 60  
 Tyr Leu Asn Lys Pro Phe Asp Ala Arg Glu Leu Leu Ala Arg Val Arg  
 65 70 75 80  
 Ala Val Leu Arg Pro Ala Cys Glu Asn Arg Pro Thr Leu Gly Asp Val  
 85 90 95  
 Ser Arg

<210> 1935  
 <211> 298  
 <212> DNA  
 <213> Homo sapiens

<400> 1935  
 accggtgtgg cgggcgcggc cttcaccacc atcggtccca ccgggcccga ggcggggttcg  
 60  
 caatacatcg tcgatacctt cctggtagtg gtgttcgggg gggeccaaag cctgttcggc  
 120  
 cccatgcct cggcgttcgt gattgcccag acccaatcgc tgcggagtt tttcctcagt  
 180  
 ggctcgatgg ccaagggtct gaccttgctg tcggtgatcc tgatcctgat gctgcgcccg  
 240

caaggggtgt tctccatcaa agtgcgcaag taaaggcgag cagataaggg ttttaagca  
298

<210> 1936  
<211> 90  
<212> PRT  
<213> Homo sapiens

<400> 1936  
Thr Gly Val Ala Gly Ala Ala Phe Thr Thr Ile Gly Ser Thr Gly Pro  
1 5 10 15  
Thr Ala Gly Ser Gln Tyr Ile Val Asp Thr Phe Leu Val Val Val Phe  
20 25 30  
Gly Gly Ala Gln Ser Leu Phe Gly Pro Ile Ala Ser Ala Phe Val Ile  
35 40 45  
Ala Gln Thr Gln Ser Leu Ser Glu Phe Phe Leu Ser Gly Ser Met Ala  
50 55 60  
Lys Val Leu Thr Leu Ser Ser Val Ile Leu Ile Leu Met Leu Arg Pro  
65 70 75 80  
Gln Gly Leu Phe Ser Ile Lys Val Arg Lys  
85 90

<210> 1937  
<211> 513  
<212> DNA  
<213> Homo sapiens

<400> 1937  
gcacggcgca cagtaacacc aactcgaaag agaccttatg aatgcaaggt gtgcgggaaa  
60  
gcctttaatt ctcccaattt atttcaaacc catcaaagaa ctccacttgg aaagagggtcc  
120  
tataaatgta gggaaatagt gagagccttc acagttttcca gtttctttcg aaaacatgga  
180  
aaaatgcata ctggagaaaa acgctatgaa tgtaaatact gtggaaaacc tatcgattat  
240  
cccagtttat ttcaaattca tgttagaact cactctggag aaaaacccta caaatgtaaa  
300  
caatgtggta aagccttcat ttccgcaggt tacgttcgga cacatgaaat cagatctcac  
360  
gcgctggaga aatcccacca atgtcaggaa tgtgggaaga aatcagttg ttccagttcc  
420  
cttcacagac atgaaagaac tcatagtgga ggaaaactct acgaatgtca aaaatgtgac  
480  
caagtcttta gatgtccac gtcccttcac gcg  
513

<210> 1938  
<211> 171  
<212> PRT  
<213> Homo sapiens

<400> 1938  
Ala Arg Arg Thr Val Thr Pro Thr Arg Lys Arg Pro Tyr Glu Cys Lys

```

1           5           10           15
Val Cys Gly Lys Ala Phe Asn Ser Pro Asn Leu Phe Gln Ile His Gln
20           25           30
Arg Thr His Thr Gly Lys Arg Ser Tyr Lys Cys Arg Glu Ile Val Arg
35           40           45
Ala Phe Thr Val Ser Ser Phe Phe Arg Lys His Gly Lys Met His Thr
50           55           60
Gly Glu Lys Arg Tyr Glu Cys Lys Tyr Cys Gly Lys Pro Ile Asp Tyr
65           70           75           80
Pro Ser Leu Phe Gln Ile His Val Arg Thr His Ser Gly Glu Lys Pro
85           90           95
Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Ile Ser Ala Gly Tyr Val
100          105          110
Arg Thr His Glu Ile Arg Ser His Ala Leu Glu Lys Ser His Gln Cys
115          120          125
Gln Glu Cys Gly Lys Lys Leu Ser Cys Ser Ser Ser Leu His Arg His
130          135          140
Glu Arg Thr His Ser Gly Lys Leu Tyr Glu Cys Gln Lys Cys Asp
145          150          155          160
Gln Val Phe Arg Cys Pro Thr Ser Leu His Ala
165          170

```

&lt;210&gt; 1939

&lt;211&gt; 1233

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1939

```

gccggcagcg ccgctcccca gggagggagt ccgcagcctg aggtcttctc caagaaaaaa
60
aaagaaaaaa aaacaacatg gctgcaaagg agaaactgga ggcagtgtta aatgtggccc
120
tgaggggtgcc aagcatcatg ctgttgatg tctgtacag atgggatgtc agctcctttt
180
tccagcagat ccaaagaagt agccttagta ataaccctct tttccagtat aagtatttgg
240
ctcttaatat gcattatgta ggttatatct taagtgtggt gctgctaaca ttgccaggc
300
agcatctggt tcagctttat ctatatTTTT tgactgctct gctcctctat gctggacatc
360
aaatttccag ggactatggt cggagtgaac tggggtttgc ctatgagga ccaatgtatt
420
tagaacctct ctctatgaat cggtttacca cagccttaat aggtcagttg gtggtgtgta
480
ctttatgctc ctgtgtcatg aaaacaaagc agatttggtt gttttcagct cacatgcttc
540
ctctgctagc acgactctgc cttgttcctt tggagacaat tgctatcatc aataaatttg
600
ctatgatttt tactggattg gaagttctct attttcttgg gtctaattct ttggtacctt
660
ataaccttgc taaatctgca tacagagaat tggttcaggt agtggaggta tatggccttc
720
tcgccttggg aatgtccctg tggaatcaac tggtagtccc tgttcttttc atggttttct
780

```

ggctcgtctt atttgcctt cagatttact cctatttcag tactcgagat cagcctgcat  
 840  
 cacgtgagag gcttcttttc ctttttctga caaggtaatt aataagagcc tatgatacta  
 900  
 tatataacct tagaaagaga aaactttgat ctaggaatag taagttttgc agattacttt  
 960  
 tatcgttcac gttacacaac ttctgtatttt gttaagatag gattttcatt cactgggatac  
 1020  
 ctaggttttg caatgcagag aggtgctaac ataataatgt ggtttatttg gctgcactat  
 1080  
 ggaccagagt gtagcaaatg atttgtggaa aggtacatag cacatcgtaa aagtattttt  
 1140  
 tcaatttcaa gttaaaatta ttgggtcaat cagaaaaaag tatattataa aaataacatt  
 1200  
 tattgagtat tttaaagtga ccataccatt naa  
 1233

&lt;210&gt; 1940

&lt;211&gt; 266

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1940

Met	Ala	Ala	Lys	Glu	Lys	Leu	Glu	Ala	Val	Leu	Asn	Val	Ala	Leu	Arg
1				5					10					15	
Val	Pro	Ser	Ile	Met	Leu	Leu	Asp	Val	Leu	Tyr	Arg	Trp	Asp	Val	Ser
			20					25					30		
Ser	Phe	Phe	Gln	Gln	Ile	Gln	Arg	Ser	Ser	Leu	Ser	Asn	Asn	Pro	Leu
		35				40						45			
Phe	Gln	Tyr	Lys	Tyr	Leu	Ala	Leu	Asn	Met	His	Tyr	Val	Gly	Tyr	Ile
		50				55					60				
Leu	Ser	Val	Val	Leu	Leu	Thr	Leu	Pro	Arg	Gln	His	Leu	Val	Gln	Leu
65					70				75					80	
Tyr	Leu	Tyr	Phe	Leu	Thr	Ala	Leu	Leu	Leu	Tyr	Ala	Gly	His	Gln	Ile
			85						90					95	
Ser	Arg	Asp	Tyr	Val	Arg	Ser	Glu	Leu	Gly	Phe	Ala	Tyr	Glu	Gly	Pro
		100						105					110		
Met	Tyr	Leu	Glu	Pro	Leu	Ser	Met	Asn	Arg	Phe	Thr	Thr	Ala	Leu	Ile
		115					120					125			
Gly	Gln	Leu	Val	Val	Cys	Thr	Leu	Cys	Ser	Cys	Val	Met	Lys	Thr	Lys
		130				135					140				
Gln	Ile	Trp	Leu	Phe	Ser	Ala	His	Met	Leu	Pro	Leu	Leu	Ala	Arg	Leu
145					150				155					160	
Cys	Leu	Val	Pro	Leu	Glu	Thr	Ile	Ala	Ile	Ile	Asn	Lys	Phe	Ala	Met
			165					170					175		
Ile	Phe	Thr	Gly	Leu	Glu	Val	Leu	Tyr	Phe	Leu	Gly	Ser	Asn	Leu	Leu
		180						185				190			
Val	Pro	Tyr	Asn	Leu	Ala	Lys	Ser	Ala	Tyr	Arg	Glu	Leu	Val	Gln	Val
		195					200					205			
Val	Glu	Val	Tyr	Gly	Leu	Leu	Ala	Leu	Gly	Met	Ser	Leu	Trp	Asn	Gln
		210				215					220				
Leu	Val	Val	Pro	Val	Leu	Phe	Met	Val	Phe	Trp	Leu	Val	Leu	Phe	Ala
225					230				235					240	
Leu	Gln	Ile	Tyr	Ser	Tyr	Phe	Ser	Thr	Arg	Asp	Gln	Pro	Ala	Ser	Arg

245 250 255  
 Glu Arg Leu Leu Phe Leu Phe Leu Thr Arg  
 260 265  
 <210> 1941  
 <211> 411  
 <212> DNA  
 <213> Homo sapiens  
 <400> 1941  
 ctggggccct gccccacagc atcatgatgg ggaaactccc cctggggggtc gtctcccctt  
 60  
 atgtgaagat gagttcgggg ggctacacgg accccctgaa attctacgcc accagctact  
 120  
 gcacagccta cggtcgggag gatttcaagc cccgtgtggg cagtcacgta ggcaccggct  
 180  
 acaaatcaaa tttccagccc gtggtctcat gccaaagccag tctggaggcc ttagacaacc  
 240  
 cggccagggg ggaacaagcc caggaccatt tccagtctgt ggccagccag agctaccgcc  
 300  
 ccctggaggt gcctgacggc aagcatcccc tgccctggag catgcgccag accagctcag  
 360  
 gctatgggcg ggagaagccc agtgcgggtc cccccaccaa ggaggtccgg a  
 411

<210> 1942  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 1942  
 Met Met Gly Lys Leu Pro Leu Gly Val Val Ser Pro Tyr Val Lys Met  
 1 5 10 15  
 Ser Ser Gly Gly Tyr Thr Asp Pro Leu Lys Phe Tyr Ala Thr Ser Tyr  
 20 25 30  
 Cys Thr Ala Tyr Gly Arg Glu Asp Phe Lys Pro Arg Val Gly Ser His  
 35 40 45  
 Val Gly Thr Gly Tyr Lys Ser Asn Phe Gln Pro Val Val Ser Cys Gln  
 50 55 60  
 Ala Ser Leu Glu Ala Leu Asp Asn Pro Ala Arg Gly Glu Gln Ala Gln  
 65 70 75 80  
 Asp His Phe Gln Ser Val Ala Ser Gln Ser Tyr Arg Pro Leu Glu Val  
 85 90 95  
 Pro Asp Gly Lys His Pro Leu Pro Trp Ser Met Arg Gln Thr Ser Ser  
 100 105 110  
 Gly Tyr Gly Arg Glu Lys Pro Ser Ala Gly Pro Pro Thr Lys Glu Val  
 115 120 125  
 Arg

<210> 1943  
 <211> 386  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1943

nagaaacatt cagggctcca acaggggtgga aaacatgagg ctgcaggatg tttacagga  
60  
gtctttgctg cagctcctct tggagccttt aacgagatac tatcatgcct atgaactgcc  
120  
acacagatgt acatggcata gcactgcccc aaagtatcag cccaaggaac cctactttcc  
180  
ccagcaacat ctaactcaga aatgctgac tttggcctca atctgggtccc aaaatacctc  
240  
caggggtattt tgggcttcgg tgtgttcaca cacttgggtca tgtaaactctg aacacagact  
300  
ctctctgcct tggcaagaac cccccacacc cccatagata attacaccct ttggttctcc  
360  
ctctgcaatc tcacctgcta gagacg  
386

&lt;210&gt; 1944

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1944

Met	Gly	Val	Trp	Gly	Val	Leu	Ala	Lys	Ala	Glu	Arg	Val	Cys	Val	Gln
1				5					10				15		
Ile	Tyr	Met	Thr	Lys	Cys	Val	Asn	Thr	Pro	Lys	Pro	Lys	Ile	Pro	Trp
			20					25					30		
Arg	Tyr	Phe	Gly	Thr	Arg	Leu	Arg	Pro	Lys	Ile	Ser	Ile	Ser	Glu	Leu
		35				40						45			
Asp	Val	Ala	Gly	Glu	Ser	Arg	Val	Pro	Trp	Ala	Asp	Thr	Phe	Gly	Gln
		50				55					60				
Cys	Tyr	Ala	Met	Tyr	Ile	Cys	Val	Ala	Val	His	Arg	His	Asp	Ser	Ile
					70					75				80	
Ser	Leu	Lys	Ala	Pro	Arg	Gly	Ala	Ala	Ala	Lys	Thr	Pro	Val	Lys	His
					85					90				95	
Pro	Ala	Ala	Ser	Cys	Phe	Pro	Pro	Cys	Trp	Ser	Pro	Glu	Cys	Phe	
			100					105					110		

&lt;210&gt; 1945

&lt;211&gt; 443

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1945

nacgcgtcac gaagcgcgct cggccacgt ggctccaagg gcgtccacgc gccctcctc  
60  
gaccgattgg tgtcgaacat ggcacgggtgg catgcgacgc gcaccaagat ccagctcaag  
120  
ctcgcgatcc agcgantcgg catgctacag gagaaaaaag ccgcactgca taaaaaagtg  
180  
cgactggaaa ttgcggacnn tcgtagacgc caaaagcttg aatctgcgcg cgtcaaaacc  
240  
gaatcgctga tcattggacga tatacatttg gagttgcttg aactgcttga gctctactgt  
300

gagacactct atgccagatt cggattacta gaaggacgcg acaatgagcc tgatgatgcg  
 360  
 atccgcgagc cgatgatcgc cattattcat gcggtcctc gcacagaggt gaaggaacta  
 420  
 catgtgctcc aaaacatgct gaa  
 443

<210> 1946  
 <211> 147  
 <212> PRT  
 <213> Homo sapiens

<400> 1946  
 Xaa Ala Ser Arg Ser Ala Leu Gly Pro Arg Gly Ser Lys Gly Val His  
 1 5 10 15  
 Ala Pro Leu Leu Asp Arg Leu Val Ser Asn Met Ala Arg Trp His Ala  
 20 25 30  
 Thr Arg Thr Lys Ile Gln Leu Lys Leu Ala Ile Gln Arg Xaa Gly Met  
 35 40 45  
 Leu Gln Glu Lys Lys Ala Ala Leu His Lys Lys Val Arg Leu Glu Ile  
 50 55 60  
 Ala Asp Xaa Arg Arg Arg Gln Lys Leu Glu Ser Ala Arg Val Lys Thr  
 65 70 75 80  
 Glu Ser Leu Ile Met Asp Asp Ile His Leu Glu Leu Leu Glu Leu Leu  
 85 90 95  
 Glu Leu Tyr Cys Glu Thr Leu Tyr Ala Arg Phe Gly Leu Leu Glu Gly  
 100 105 110  
 Arg Asp Asn Glu Pro Asp Asp Ala Ile Arg Glu Pro Met Ile Ala Ile  
 115 120 125  
 Ile His Ala Ala His Arg Thr Glu Val Lys Glu Leu His Val Leu Gln  
 130 135 140  
 Asn Met Leu  
 145

<210> 1947  
 <211> 472  
 <212> DNA  
 <213> Homo sapiens

<400> 1947  
 cggccgtgta ggccgtgacg gtgaccaaca gagccacagc gggcccgcgtg taggcgggag  
 60  
 gactgtgccg caggtgcagg agggtcagat ggaaacaaaa ggcgcaggcg gcctccacaa  
 120  
 gcgccccgtg gggcacggat gtgcgcaggc cagagctgca gctctgggcc atgaggctct  
 180  
 gcagcagggtg caggtcactg agctcccagg cccagcagag gcgcgtcagg gtgcaggcgg  
 240  
 cctgcatgcc cagccccgtg gccgccagct tcagcagcgt gccaggcaga gactcctcgg  
 300  
 ccatgaggaa ctcttcgagg gacacgggtg ggttggccga ggccccgtcc aaggtgaccc  
 360  
 cgtgcgccag gaagagcagg aagagcaggg tgagcagcag gtcaggccca aagtcgccag  
 420

cccagggccc gagctcgaac agcgtctca tctccaggaa gcaggccccg ag  
472

<210> 1948

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1948

Met	Arg	Thr	Leu	Phe	Glu	Leu	Gly	Pro	Trp	Ala	Gly	Asp	Phe	Gly	Pro
1				5					10					15	
Asp	Leu	Leu	Leu	Thr	Leu	Leu	Phe	Leu	Leu	Phe	Leu	Ala	His	Gly	Val
			20					25					30		
Thr	Leu	Asp	Gly	Ala	Ser	Ala	Asn	Pro	Thr	Val	Ser	Leu	Gln	Glu	Phe
		35					40					45			
Leu	Met	Ala	Glu	Glu	Ser	Leu	Pro	Gly	Thr	Leu	Leu	Lys	Leu	Ala	Ala
	50					55					60				
Gln	Gly	Leu	Gly	Met	Gln	Ala	Ala	Cys	Thr	Leu	Thr	Arg	Leu	Cys	Trp
65					70					75				80	
Ala	Trp	Glu	Leu	Ser	Asp	Leu	His	Leu	Leu	Gln	Ser	Leu	Met	Ala	Gln
				85					90				95		
Ser	Cys	Ser	Ser	Ala	Leu	Arg	Thr	Ser	Val	Pro	His	Gly	Ala	Leu	Val
			100					105					110		
Glu	Ala	Ala	Cys	Ala	Phe	Cys	Phe	His	Leu	Thr	Leu	Leu	His	Leu	Arg
		115					120					125			
His	Ser	Pro	Pro	Ala	Tyr	Ser	Gly	Pro	Ala	Val	Ala	Leu	Leu	Val	Thr
	130					135					140				
Val	Thr	Ala	Tyr	Thr	Ala										
145					150										

<210> 1949

<211> 395

<212> DNA

<213> Homo sapiens

<400> 1949

acgcgttgag ggaggcgaca tgcttcatga gcgcttggcg ccactgctca agcgacatct  
60  
gcccccttgct gatgttgcaa ggcggacagg acggcatgta attcgactcg acgtcacgct  
120  
ccggatgcct cgacgggacg ctcacaagct tccattggcc attcgcgsgt cgcttgggtct  
180  
cgaccgcgcg tacaaccggg tctacatggt cgccatgcca ccgatcgggc aatggcattc  
240  
cacagtacgc gcagcggccg tcgtatttgc gccggagccg atcgcgctgt gctttcgtca  
300  
gccggetcac gctttatgct ccacggcagg tgtggcagca tcttggcagg cgactccaag  
360  
atccgcgcct gcgtccagct tgacggcgcc ggggtt  
395

<210> 1950

<211> 125

<212> PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 1950

```

Met Leu His Glu Arg Leu Ala Pro Leu Leu Lys Arg His Leu Pro Leu
 1           5           10           15
Ala Asp Val Ala Arg Arg Thr Gly Arg His Val Ile Arg Leu Asp Val
 20           25           30
Thr Leu Arg Met Pro Arg Arg Asp Ala His Lys Leu Pro Leu Ala Ile
 35           40           45
Arg Gly Ser Leu Gly Leu Asp Arg Ala Tyr Asn Arg Val Tyr Met Val
 50           55           60
Ala Met Pro Pro Ile Gly Gln Trp His Ser Thr Val Arg Ala Ala Ala
 65           70           75           80
Val Val Phe Ala Pro Glu Pro Ile Ala Leu Cys Phe Arg Gln Pro Ala
 85           90           95
His Ala Leu Cys Ser Thr Ala Gly Val Ala Ala Ser Trp Gln Ala Thr
100           105           110
Pro Arg Ser Ala Pro Ala Ser Ser Leu Thr Ala Pro Gly
115           120           125

```

&lt;210&gt; 1951

&lt;211&gt; 363

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1951

```

cggccgcgcg ctctccgctc ccgggcccccc gccgccaccg cgccccccgc gggagatgga
60
acagcgggaac cggtcgggtg cctcgggata cctgccgcct ctgctgctgc atgccctgct
120
gctcttcgtg gccgacgtg cattcacaga agtccccaaa gatgtgacag tacgggaggg
180
agacgacatc gaaatgcctt gcgcgttcgg ggccagcggg gccacctcgt attcgttgga
240
gattcagtgg tggtaacctca aggagccacc ccgggagctg ctgcacgagc tggcgctcag
300
cgtgccgggc gcccgagca aggtaacaaa taaggatgca actaaaatca gcaccgtacg
360
cgt
363

```

&lt;210&gt; 1952

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1952

```

Arg Pro Pro Pro Leu Arg Ser Arg Ala Pro Ala Ala Thr Ala Pro Pro
 1           5           10           15
Ala Gly Asp Gly Thr Ala Glu Pro Ala Arg Cys Pro Arg Ile Pro Ala
 20           25           30
Ala Ser Ala Ala Ala Cys Pro Ala Ala Leu Arg Gly Arg Arg Cys Ile
 35           40           45
His Arg Ser Pro Gln Arg Cys Asp Ser Thr Gly Gly Arg Arg His Arg

```

```

      50              55              60
Asn Ala Leu Arg Val Pro Gly Gln Arg Ser His Leu Val Phe Ala Gly
65              70              75              80
Asp Ser Val Val Val Pro Gln Gly Ala Thr Pro Gly Ala Ala Ala Arg
      85              90              95
Ala Gly Ala Gln Arg Ala Gly Arg Pro Glu Gln Gly Asn Lys
      100              105              110

```

<210> 1953  
 <211> 329  
 <212> DNA  
 <213> Homo sapiens

<400> 1953  
 acgcgtcagc ctgagcccaa taactataaa agagtcgcaa ccatgactgt gctattgagt  
 60  
 gagcgcagcc agattttccg ggggtgccgat gcctacgcgg tgtcggacta cgtcaaccag  
 120  
 catgtgggca gccactgcat tcgctgcct cccaagggcc ggccacgggc gattatcagc  
 180  
 catcgcaact ttgccagcct ggacctgtgc cgcacagct acggcgctcc ggtacggggtc  
 240  
 acatcggtgg cgctggagac catctatcac ctgcagatcc tgttgagcgg gcattgccgc  
 300  
 tccagctccc gtggtgagga tgacgtggn  
 329

<210> 1954  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1954
Thr Arg Gln Pro Glu Pro Asn Asn Tyr Lys Arg Val Ala Thr Met Thr
1              5              10              15
Val Leu Leu Ser Glu Arg Ser Gln Ile Phe Arg Gly Ala Asp Ala Tyr
      20              25              30
Ala Val Ser Asp Tyr Val Asn Gln His Val Gly Ser His Cys Ile Arg
      35              40              45
Leu Pro Pro Lys Gly Arg Pro Arg Ala Ser Ile Ser His Arg Thr Phe
      50              55              60
Ala Ser Leu Asp Leu Cys Arg Ile Ser Tyr Gly Ala Pro Val Arg Val
65              70              75              80
Thr Ser Val Ala Leu Glu Thr Ile Tyr His Leu Gln Ile Leu Leu Ser
      85              90              95
Gly His Cys Arg Ser Ser Ser Arg Gly Glu Asp Asp Val
      100              105

```

<210> 1955  
 <211> 415  
 <212> DNA  
 <213> Homo sapiens

<400> 1955

acgcgtggct cgacgaaaac caagtacgag acatgcccga caaggtagta tcacacatgg  
 60  
 tggaatactg ctggggggcg ttcacagaca acatcaaata cgtctgtagct gcccaatatt  
 120  
 ggaaagggcc acacaagccc gatagtgacc atcaacggat cattgtaggc tatttcaaaa  
 180  
 ccgccaaaac agccatgaac gcagcaaaac aattccactg gaacaccccg ctacaacaac  
 240  
 aatggaaaac atggatactc ccagtccaca acggcaccgt gtccgagttt ttcacccaac  
 300  
 aaaaaacttt gctagacgag caagacgata gcaatagcga gctgccggag catctacaaa  
 360  
 acgtcatgtg cggcaaaaac ctccaccacc aagacgacac catatcgtgg tgcac  
 415

<210> 1956

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1956

Met	Pro	Asp	Lys	Val	Leu	Ser	His	Met	Val	Glu	Tyr	Cys	Trp	Gly	Arg
1			5					10					15		
Phe	Thr	Asp	Asn	Ile	Lys	Tyr	Ala	Val	Ala	Ala	Gln	Tyr	Trp	Lys	Gly
		20					25					30			
Pro	His	Lys	Pro	Asp	Ser	Asp	His	Gln	Arg	Ile	Ile	Val	Gly	Tyr	Phe
		35					40					45			
Lys	Thr	Ala	Lys	Gln	Ala	Met	Asn	Ala	Ala	Lys	Gln	Phe	His	Trp	Asn
	50					55				60					
Thr	Arg	Leu	Gln	Gln	Gln	Trp	Lys	Thr	Trp	Ile	Leu	Pro	Val	His	Asn
	65				70					75				80	
Gly	Thr	Val	Ser	Glu	Phe	Phe	Thr	Gln	Gln	Lys	Thr	Leu	Leu	Asp	Glu
			85					90						95	
Gln	Asp	Asp	Ser	Asn	Ser	Glu	Leu	Pro	Glu	His	Leu	Gln	Asn	Val	Met
		100						105					110		
Cys	Gly	Lys	Thr	Leu	His	His	Gln	Asp	Asp	Thr	Ile	Ser	Trp	Cys	
		115					120						125		

<210> 1957

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1957

acgcgttccg gagagatttt cctaacctct ctccgagctg ctgagccgat cggtagccac  
 60  
 caggagctcc tccctgtgag gacaaagtcc cagagtcggg gtcacggggc ttacttattg  
 120  
 gggaggaggc ccgccggggc cgcagtgggc gaggggcccct tggcgcgctc ctgggaggtc  
 180  
 agacctggca cagtgtggcg aaggtttcca gtgcgatccc gagtcgaggc cgcatttcgc  
 240  
 ggtgactgcc agcatgaacc gcagccgacc gagttctgcg atcgggcttc tccgcagagt  
 300

ggggaccctg gggaaggcgc caacttctct cctctgccc cctcactccc cgcgggcgtc  
 360  
 cctggggcgc ctgcccgggc cgcactgggc ggccctccatc gtcccttccc tctacctgca  
 420  
 ctgccccagg cgggagagag gccttgcccc nncgaggac cagctgcagc gggcagcggg  
 480  
 gtccctgctcc cccaaccccc gccccatggc acggggctga accggt  
 526

<210> 1958

<211> 175

<212> PRT

<213> Homo sapiens

<400> 1958

Thr	Arg	Ser	Gly	Glu	Ile	Phe	Leu	Thr	Ser	Leu	Arg	Ala	Ala	Glu	Pro
1				5					10					15	
Ile	Gly	Asp	His	Gln	Glu	Leu	Leu	Pro	Val	Arg	Thr	Lys	Phe	Gln	Ser
			20					25					30		
Arg	Gly	His	Gly	Pro	Tyr	Leu	Leu	Gly	Arg	Arg	Pro	Ala	Gly	Ala	Ala
		35					40					45			
Val	Gly	Glu	Gly	Pro	Leu	Ala	Arg	Ser	Trp	Glu	Val	Arg	Pro	Gly	Thr
	50					55				60					
Val	Trp	Arg	Arg	Phe	Pro	Val	Arg	Ser	Arg	Val	Glu	Gly	Ala	Phe	Arg
65					70					75				80	
Gly	Asp	Cys	Gln	His	Glu	Pro	Gln	Pro	Thr	Glu	Phe	Cys	Asp	Arg	Ala
			85						90				95		
Ser	Pro	Gln	Ser	Gly	Asp	Pro	Gly	Glu	Gly	Ala	Asn	Phe	Ser	Pro	Leu
		100					105						110		
Pro	Thr	Ser	Leu	Pro	Ala	Gly	Val	Pro	Gly	Pro	Pro	Ala	Arg	Ala	Ala
	115						120					125			
Leu	Gly	Gly	Leu	His	Arg	Pro	Phe	Pro	Leu	Pro	Ala	Leu	Pro	Gln	Ala
	130					135					140				
Gly	Glu	Arg	Pro	Trp	Pro	Xaa	Glu	Gly	Pro	Ala	Ala	Ala	Gly	Ser	Gly
145					150					155				160	
Val	Leu	Leu	Pro	Gln	Pro	Pro	Pro	His	Gly	Thr	Gly	Leu	Asn	Arg	
			165						170				175		

<210> 1959

<211> 378

<212> DNA

<213> Homo sapiens

<400> 1959

gtgcaccgga cggctcctcc aacggatcat gcgacggccc agcggaaggc tcacccgagt  
 60  
 cgtcagaagg atcagggcgc ttgtcgtcgt cagacttcag gacatccac gacatggtga  
 120  
 acggctggga ggagaccttg tcccgcgcgg tcttggcgcc gacaacaaca ccgctcatgg  
 180  
 tgtattttcc ggcattgagt aagaaccagt gggcatgctg atgacccttg atcggcagt  
 240  
 aggtcctttt gaccacctga tatgtgtcat cagcgaggaa ggtgccgagt ttggcgttct  
 300

cgtctgcttc gggatgaattg ccgaggaggt acatcttgcc tggaccgta atcgcggtga  
 360  
 agtcgacgcg caacgcgt  
 378

<210> 1960  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 1960  
 Met Tyr Leu Leu Gly Asn Ser Pro Glu Ala Asp Glu Asn Ala Lys Leu  
 1 5 10 15  
 Gly Thr Phe Leu Ala Asp Asp Thr Tyr Gln Val Val Lys Gly Ala Ser  
 20 25 30  
 Leu Pro Ile Lys Gly His Gln His Ala His Trp Phe Phe Thr His Ala  
 35 40 45  
 Gly Lys Tyr Thr Met Ser Gly Val Val Val Gly Ala Lys Thr Asp Gly  
 50 55 60  
 Asp Lys Val Ser Ser Gln Pro Phe Thr Met Ser Trp Asp Val Leu Lys  
 65 70 75 80  
 Ser Asp Asp Asp Lys Arg Pro Asp Pro Ser Asp Asp Ser Gly Glu Pro  
 85 90 95  
 Ser Ala Gly Pro Ser His Asp Pro Leu Glu Glu Pro Ser Gly Ala  
 100 105 110

<210> 1961  
 <211> 384  
 <212> DNA  
 <213> Homo sapiens

<400> 1961  
 ggatccaccc cggaaaccgg caggatgaag ggggcaagtg aggagaagct ggcattctgtg  
 60  
 tccaacctgg tcaactgtgtt tgagaatagc aggacccag aagcagcacc cagaggccag  
 120  
 aggctagagg acgtgcatca ccgccctgag tgcaggcctc ccgagtcccc aggaccacgg  
 180  
 gagaagacga atgtcgggga ggccgtgggg tctgagccca ggacagtcag caggaggtag  
 240  
 ctgaactccc tgaagaacaa gctgtccagc gaagcctgga ggaaatcttg ccagcctgtg  
 300  
 accctctcag gatcggggac gcaggagcca gagaagaaga tcgtccagga gctgctggag  
 360  
 acagagcagg cctatgtggc gcgc  
 384

<210> 1962  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 1962  
 Gly Ser Thr Pro Glu Thr Gly Arg Met Lys Gly Ala Ser Glu Glu Lys

```

      1           5           10           15
Leu Ala Ser Val Ser Asn Leu Val Thr Val Phe Glu Asn Ser Arg Thr
      20           25           30
Pro Glu Ala Ala Pro Arg Gly Gln Arg Leu Glu Asp Val His His Arg
      35           40           45
Pro Glu Cys Arg Pro Pro Glu Ser Pro Gly Pro Arg Glu Lys Thr Asn
      50           55           60
Val Gly Glu Ala Val Gly Ser Glu Pro Arg Thr Val Ser Arg Arg Tyr
      65           70           75           80
Leu Asn Ser Leu Lys Asn Lys Leu Ser Ser Glu Ala Trp Arg Lys Ser
      85           90           95
Cys Gln Pro Val Thr Leu Ser Gly Ser Gly Thr Gln Glu Pro Glu Lys
      100          105          110
Lys Ile Val Gln Glu Leu Leu Glu Thr Glu Gln Ala Tyr Val Ala Arg
      115          120          125

```

<210> 1963  
 <211> 323  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1963
nnncccttcc tacctcecca tactccccac cctctctcct cccctgtgac tgagcttgca
60
ggcatgaaac accacactgg cctctctccc tctgttttgc cccttctgtc gtctctctcc
120
cacagctgcc tggtctctcg gcgtcagtc accaccttct gcagctctcc ctcaccctgg
180
cgaccactca ggcatgcac tcgcggggccc ccttcagacc tctcggggtc atcttccctc
240
tccctggcca ttatttttct tcatctgggc tgggcccggg ggggcgttcc ccccttctc
300
cttctttctt ttttttctc ttt
323

```

<210> 1964  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1964
Xaa Pro Phe Leu Pro Ser His Thr Pro His Pro Ser Ser Ser Pro Cys
      1           5           10           15
Ala Glu Leu Ala Gly Met Lys His Pro Pro Gly Leu Ser Pro Ser Val
      20           25           30
Leu Pro Leu Leu Ser Ser Leu Ser His Ser Cys Leu Ala Leu Arg Arg
      35           40           45
Gln Ser Thr Thr Phe Cys Ser Ser Pro Ser Pro Trp Arg Pro Leu Arg
      50           55           60
His Ala Ser Arg Gly Pro Pro Ser Asp Leu Ser Gly Ser Ser Ser Pro
      65           70           75           80
Ser Leu Ala Ile Ile Phe Leu His Leu Gly Trp Ala Arg Arg Gly Val
      85           90           95
Pro Pro Leu Pro Leu Leu Ser Phe Phe Phe Ser

```

100

105

<210> 1965  
<211> 1416  
<212> DNA  
<213> Homo sapiens

<400> 1965  
cggctggggc aggagctgga cgacgccacc atggacctgg agcagcagcg gcagcttggtg  
60  
agcaccttgg agaagaagca gcgcaagttt gaccagcttc tggcagagga gaaggcagct  
120  
gtacttcggg cagtggagga acgtgagcgg gccgaggcag agggccggga gcgtgaggct  
180  
cgggccctgt cactgacacg ggactggag gaggagcagg aggcacgtga ggagctggag  
240  
cggcagaacc gggccctgcy ggctgagctg gaggcactgc tgagcagcaa ggatgacgtc  
300  
ggcaagagcg tgcattgagct ggaacgagcc tgccgggtag cagaacaggc agccaatgat  
360  
ctgcgagcac aggtgacaga actggaggat gagctgacag cggccgagga tgccaagctg  
420  
cgtctggagg tgactgtgca ggctctcaag actcagcatg agcgtgacct gcagggccgt  
480  
gatgaggctg gtgaagagag gcggaggcag ctggccaagc agctgagaga tgcagagggtg  
540  
gagcgggatg aggagcggaa gcagcgact ctggccgtgg ctgcccgcaa gaagctggag  
600  
ggagagctgg aggagctgaa ggctcagatg gcctctgccg gccagggcaa ggaggaggcg  
660  
gtgaagcagc ttcgcaagat gcaggcccag atgaaggagc tatggcggga ggtggaggag  
720  
acagcacct cccgggagga gatcttctcc cagaatcggg aaagtgaata gcgcctcaag  
780  
ggcctggagg ctgagggtgt gcggctgcag gaggaactgg ccgcctcgga cgtgctcgg  
840  
cggcaggccc agcaggaccg ggatgagatg gcagatgagg tggccaatgg taaccttagc  
900  
aaggcagcca ttctggagga gaagcgtcag ctggaggggc gcctggggca gttggaggaa  
960  
gagctggagg aggagcagac anactcagag ctgctcaatg accgctaccg caagctgctc  
1020  
ctgcaggtag agtcactgac cacagagctg tcagctgagc gcagtttctc agccaaggca  
1080  
gagagcgggc ggcagcagct ggaacggcag atccaggagc tacggggacg cctgggtgag  
1140  
gaggatgctg gggcccgctc ccgccacaag atgaccattg ctgcccttga gtctaagttg  
1200  
gcccaggctg aggagcagct agagcaagag accagagagc gcacccctc tggaaagctg  
1260  
gtgccccaaa gtaagaagcg gtttaaagag gtggtgctcc aggtggagga ggagcggagg  
1320  
gtggctgacc agctccggga ccagctggag aagggaaacc ttcagtgcaa gcagctgaag  
1380

1485

cggcagctgg aggaggccga ggaggaggca tccccg  
1416

<210> 1966  
<211> 472  
<212> PRT  
<213> Homo sapiens

<400> 1966  
Arg Leu Gly Gln Glu Leu Asp Asp Ala Thr Met Asp Leu Glu Gln Gln  
1 5 10 15  
Arg Gln Leu Val Ser Thr Leu Glu Lys Lys Gln Arg Lys Phe Asp Gln  
20 25 30  
Leu Leu Ala Glu Glu Lys Ala Ala Val Leu Arg Ala Val Glu Glu Arg  
35 40 45  
Glu Arg Ala Glu Ala Glu Gly Arg Glu Arg Glu Ala Arg Ala Leu Ser  
50 55 60  
Leu Thr Arg Ala Leu Glu Glu Glu Gln Glu Ala Arg Glu Glu Leu Glu  
65 70 75 80  
Arg Gln Asn Arg Ala Leu Arg Ala Glu Leu Glu Ala Leu Leu Ser Ser  
85 90 95  
Lys Asp Asp Val Gly Lys Ser Val His Glu Leu Glu Arg Ala Cys Arg  
100 105 110  
Val Ala Glu Gln Ala Ala Asn Asp Leu Arg Ala Gln Val Thr Glu Leu  
115 120 125  
Glu Asp Glu Leu Thr Ala Ala Glu Asp Ala Lys Leu Arg Leu Glu Val  
130 135 140  
Thr Val Gln Ala Leu Lys Thr Gln His Glu Arg Asp Leu Gln Gly Arg  
145 150 155 160  
Asp Glu Ala Gly Glu Glu Arg Arg Arg Gln Leu Ala Lys Gln Leu Arg  
165 170 175  
Asp Ala Glu Val Glu Arg Asp Glu Glu Arg Lys Gln Arg Thr Leu Ala  
180 185 190  
Val Ala Ala Arg Lys Lys Leu Glu Gly Glu Leu Glu Glu Leu Lys Ala  
195 200 205  
Gln Met Ala Ser Ala Gly Gln Gly Lys Glu Glu Ala Val Lys Gln Leu  
210 215 220  
Arg Lys Met Gln Ala Gln Met Lys Glu Leu Trp Arg Glu Val Glu Glu  
225 230 235 240  
Thr Arg Thr Ser Arg Glu Glu Ile Phe Ser Gln Asn Arg Glu Ser Glu  
245 250 255  
Lys Arg Leu Lys Gly Leu Glu Ala Glu Val Leu Arg Leu Gln Glu Glu  
260 265 270  
Leu Ala Ala Ser Asp Arg Ala Arg Arg Gln Ala Gln Gln Asp Arg Asp  
275 280 285  
Glu Met Ala Asp Glu Val Ala Asn Gly Asn Leu Ser Lys Ala Ala Ile  
290 295 300  
Leu Glu Glu Lys Arg Gln Leu Glu Gly Arg Leu Gly Gln Leu Glu Glu  
305 310 315 320  
Glu Leu Glu Glu Glu Gln Thr Xaa Ser Glu Leu Leu Asn Asp Arg Tyr  
325 330 335  
Arg Lys Leu Leu Leu Gln Val Glu Ser Leu Thr Thr Glu Leu Ser Ala  
340 345 350  
Glu Arg Ser Phe Ser Ala Lys Ala Glu Ser Gly Arg Gln Gln Leu Glu



```

      355              360              365
Arg Gln Ile Gln Glu Leu Arg Gly Arg Leu Gly Glu Glu Asp Ala Gly
      370              375              380
Ala Arg Ala Arg His Lys Met Thr Ile Ala Ala Leu Glu Ser Lys Leu
385              390              395              400
Ala Gln Ala Glu Glu Gln Leu Glu Gln Glu Thr Arg Glu Arg Ile Leu
      405              410              415
Ser Gly Lys Leu Val Pro Lys Ser Lys Lys Arg Phe Lys Glu Val Val
      420              425              430
Leu Gln Val Glu Glu Glu Arg Arg Val Ala Asp Gln Leu Arg Asp Gln
      435              440              445
Leu Glu Lys Gly Asn Leu Arg Val Lys Gln Leu Lys Arg Gln Leu Glu
      450              455              460
Glu Ala Glu Glu Glu Ala Ser Arg
465              470

```

&lt;210&gt; 1967

&lt;211&gt; 401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1967

```

aaatttgaat cctggaaagc tgatctcgat aagtcgtttg tcgagctgtt tgcggcgttg
60
ccgacgcgcc taatttggat cgtgcagtaa gagcttctcc attcctcggc gccaaaggga
120
tgcattcacat ctgcgggcca gtcagctccc ctgggcttgc actcgtcggg gatgctggcc
180
ttgcaccaga tcctctgtgg ggcgtcgggt gtggctgggc attccagtcg gcagcttggt
240
tagtggactg taccggatct catttggctg accggaccgc cttagatagg gcgcttcgca
300
gttatcatcg ataccaccgg cattctcttg ggtggcatga acgcctcatc tctagatatg
360
caaacggcgg gggttttcat gcgctcgaga agctgatgct g
401

```

&lt;210&gt; 1968

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1968

```

Met His His Ile Ser Arg Pro Val Ser Ser Pro Gly Leu Ala Leu Val
 1              5              10              15
Gly Asp Ala Gly Leu Ala Pro Asp Pro Leu Trp Gly Val Gly Cys Gly
      20              25              30
Trp Ala Phe Gln Ser Ala Ala Trp Leu Val Asp Cys Thr Gly Ser His
      35              40              45
Leu Ala Asp Arg Thr Ala Leu Asp Arg Ala Leu Arg Ser Tyr His Arg
      50              55              60
Tyr His Arg His Ser Leu Gly Trp His Glu Arg Leu Ile Ser Arg Tyr
65              70              75              80
Ala Asn Gly Arg Gly Phe His Ala Leu Glu Lys Leu Met Leu

```

85

90

<210> 1969  
 <211> 464  
 <212> DNA  
 <213> Homo sapiens

<400> 1969  
 nncatcgacg cgcactggac tcattctgggt gacggccac agatggacac tctgcgcgag  
 60  
 gaggtcgccg ttcaccgcgt caccgatgct gtcaccctgc tcggtcacgt cgccaacacc  
 120  
 caggatcatg cgaccacgcg tgatctcaaa ccgtcagtat tcgtcaacct ctcttcctcg  
 180  
 gaaggacttc ctgtatcaat gatggagggt gcttcctcgc gtatcccat tatcgcgact  
 240  
 ggcgtcgccg gagtaggaga aatcgtctcg tctgacaacg ggcattctatt gcctgcccag  
 300  
 ttcaccgaca ccagggcgcg tgacgcgtta gtgcagctgg cagctctgtc tgaggacgag  
 360  
 taccagcagg tgtgtcaggc ctcccgccag gtgtgggaag aaaagtccg cgcctctgtc  
 420  
 gtctaccccg aattctgtcg cgagtgtctg ggcgacgctg atca  
 464

<210> 1970  
 <211> 154  
 <212> PRT  
 <213> Homo sapiens

<400> 1970  
 Xaa Ile Asp Ala His Trp Thr His Leu Gly Asp Gly Pro Gln Met Asp  
 1 5 10 15  
 Thr Leu Arg Glu Glu Val Ala Val His Arg Val Thr Asp Ala Val Thr  
 20 25 30  
 Leu Leu Gly His Val Ala Asn Thr Gln Val Met Ala Thr Gln Arg Asp  
 35 40 45  
 Leu Lys Pro Ser Val Phe Val Asn Leu Ser Ser Ser Glu Gly Leu Pro  
 50 55 60  
 Val Ser Met Met Glu Val Ala Ser Leu Gly Ile Pro Ile Ile Ala Thr  
 65 70 75 80  
 Gly Val Gly Gly Val Gly Glu Ile Val Ser Ser Asp Asn Gly His Leu  
 85 90 95  
 Leu Pro Ala Glu Phe Thr Asp Thr Gln Ala Ser Asp Ala Leu Val Gln  
 100 105 110  
 Leu Ala Arg Leu Ser Glu Asp Glu Tyr Gln Gln Val Cys Gln Ala Ser  
 115 120 125  
 Arg Gln Val Trp Glu Glu Lys Phe Arg Ala Ser Val Val Tyr Pro Glu  
 130 135 140  
 Phe Cys Arg Glu Cys Trp Gly Asp Ala Asp  
 145 150

<210> 1971  
 <211> 520

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1971

```

accggttgta ggtgtacaaa cactgctgac atcagccagc tcctgagtgt caggagagac
60
acagaagtac tcagggttggt tgtgtgttga ccgagagaac agctcagatt gaggaacgag
120
acagacgacg acaaaaaaaa ttagagcatc agttgatata atacaaatgg aatataatgc
180
atctaacatt tcaaattcaa gacatgattc tgatgaaatc agtggtaaaa tgaatacata
240
tatgaattct acgacttcta agaaggatac tgggtgtgcaa acagatgact taaatatagg
300
aatattcacc aatgcagaat cacattgtgg atcattaatg gagagggaca tcacaaattg
360
ttcatctcct gagatttcgg cagaacttat tggacagttt agcaccaaga aaaacaagca
420
agaactaact caggataaag gagccagctt agaaaaagaa aacaatcggg gtaatgacca
480
gtgtaatcag ttcacaagaa ttgagaaaca aacaaaacag
520

```

&lt;210&gt; 1972

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1972

```

Met Glu Tyr Asn Ala Ser Asn Ile Ser Asn Ser Arg His Asp Ser Asp
1      5      10      15
Glu Ile Ser Gly Lys Met Asn Thr Tyr Met Asn Ser Thr Thr Ser Lys
20     25     30
Lys Asp Thr Gly Val Gln Thr Asp Asp Leu Asn Ile Gly Ile Phe Thr
35     40     45
Asn Ala Glu Ser His Cys Gly Ser Leu Met Glu Arg Asp Ile Thr Asn
50     55     60
Cys Ser Ser Pro Glu Ile Ser Ala Glu Leu Ile Gly Gln Phe Ser Thr
65     70     75     80
Lys Lys Asn Lys Gln Glu Leu Thr Gln Asp Lys Gly Ala Ser Leu Glu
85     90     95
Lys Glu Asn Asn Arg Cys Asn Asp Gln Cys Asn Gln Phe Thr Arg Ile
100    105    110
Glu Lys Gln Thr Lys Gln
115

```

&lt;210&gt; 1973

&lt;211&gt; 331

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1973

```

acgcgtacct atgccacgag catggcggat cagttgacgg cggcactagg cagctactta
60

```

tccgcaggtc aaaagaaatc ggacggcctc ggatccttct tcgtggccac tacccttgaa  
 120  
 gagctacaag cgatgaacag cgatactcgc ttcaccacga gcgtgggaat cgacctatcc  
 180  
 cccgctcgat ctttctccgc ttggggcgtg cgcgggaacga ctttttctgc gccgctgatg  
 240  
 acaaaggett cccgctcgag ctcggccgca ccaagcgcac cgcgtcgctg tggcaaaagc  
 300  
 tggcgtcgc cgccagtga atcgtgtgca c  
 331

<210> 1974

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1974

Met	Ala	Asp	Gln	Leu	Thr	Ala	Ala	Leu	Gly	Ser	Tyr	Leu	Ser	Ala	Gly
1			5						10					15	
Gln	Lys	Lys	Ser	Asp	Gly	Leu	Gly	Ser	Phe	Phe	Val	Ala	Thr	Thr	Leu
		20						25					30		
Glu	Glu	Leu	Gln	Ala	Met	Asn	Ser	Asp	Thr	Arg	Phe	Thr	Thr	Ser	Val
		35					40					45			
Gly	Ile	Asp	Leu	Ser	Pro	Ala	Arg	Ser	Phe	Ser	Ala	Trp	Ala	Leu	Arg
	50					55					60				
Gly	Thr	Thr	Phe	Ser	Ala	Pro	Ser	Met	Thr	Lys	Ala	Ser	Arg	Ser	Ser
65					70					75				80	
Ser	Ala	Ala	Pro	Ser	Ala	Pro	Arg	Arg	Cys	Gly	Lys	Ser	Trp	Arg	Ser
			85					90						95	
Pro	Pro	Val	Lys	Ser	Cys	Ala									
						100									

<210> 1975

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1975

acgcgtcggg ccaatcgctc gtggagctgc aaaccgcgct gcaagcccg cgcgagcaac  
 60  
 gtctgacggc ttggaccgat gcgctgggtg caatgggcgc caagctgagc caggcgtggg  
 120  
 agaaggcggg tgccgacacg gcgagccgctc agcaggagat ttgcgatgcg ctggcgcgaga  
 180  
 ctgcgcgcga catctcttcg caaacacagg cccacgccaa caacacgac gccgagattt  
 240  
 ctcgactggt gcaggcgcc ctcggaggcgc caaaggctgc tgccgaagt gttgccgagc  
 300  
 tgcgccagaa gctgtccgac agcatgggtcc gcgacacggg cgatgctgga agaacgcacg  
 360  
 cgcattgctgg  
 370

<210> 1976

<211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 1976  
 Met Arg Val Arg Ser Ser Ser Ile Ala Arg Val Ala Asp His Ala Val  
 1 5 10 15  
 Gly Gln Leu Leu Ala Gln Leu Gly Asn His Phe Gly Ser Ser Leu Trp  
 20 25 30  
 Arg Leu Arg Gly Gly Leu His Gln Ser Arg Asn Leu Gly Asp Arg Val  
 35 40 45  
 Val Gly Val Gly Leu Cys Leu Arg Arg Asp Val Ala Arg Ser Leu Arg  
 50 55 60  
 Gln Arg Ile Ala Asn Leu Leu Leu Thr Ala Arg Arg Val Gly Thr Arg  
 65 70 75 80  
 Leu Leu Pro Arg Leu Ala Gln Leu Gly Ala His Cys Thr Gln Arg Ile  
 85 90 95  
 Gly Pro Ser Arg Gln Thr Leu Leu Val Ala Gly Leu Gln Arg Gly Leu  
 100 105 110  
 Gln Leu His Glu Arg Leu Ala Arg Arg  
 115 120

<210> 1977  
 <211> 551  
 <212> DNA  
 <213> Homo sapiens

<400> 1977  
 ccgcgggcag gtggcatgtg ggctgagccc cgaagaaagt caaaagataa ggaagaggac  
 60  
 aggtttctag gaagaagttg gctgagcagg agttgggcag gttaagagct gggtagggg  
 120  
 agagaggaga caggcagcca ggctgttaca caggaggagg cacaggaggt gcacgggagg  
 180  
 agccaagcgg gagggcaggc aatggccagg ttggaagatc tgcacctccc tggttactgg  
 240  
 aggaatgaaa ctggttgagc tgactgcagg gagaggtcc agttgaaaca tgagagaagt  
 300  
 actggatgaa aaaggtgccca caactgagac cagaaggcag attcctgaac tggtaggggtg  
 360  
 ccaaggatgc atatcaaaga ctgctggaac atgtgggtat caagattgaa gacagtgaag  
 420  
 gttaaaatgg cctgatccaa agctggaggg ggggtggagt gactggtgac tgctcttccc  
 480  
 acggacaggc attcaggcaa gctttcaaac tgagctctaa attctgctct gggttctaa  
 540  
 cagactcatg a  
 551

<210> 1978  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1978

```

Met His Pro Trp His Pro Thr Ser Ser Gly Ile Cys Leu Leu Val Ser
 1          5          10          15
Val Val Ala Pro Phe Ser Ser Ser Thr Ser Leu Met Phe Gln Leu Glu
          20          25          30
Pro Leu Pro Ala Val Ser Pro Thr Ser Phe Ile Pro Pro Val Thr Arg
          35          40          45
Glu Val Gln Ile Phe Gln Pro Gly His Cys Leu Pro Ser Arg Leu Ala
          50          55          60
Pro Pro Val His Leu Leu Cys Ser Ser Leu Cys Asn Ser Leu Ala Ala
65          70          75          80
Cys Leu Leu Ser Pro Leu Thr Gln Leu Leu Thr Cys Pro Thr Pro Ala
          85          90          95
Gln Pro Thr Ser Ser
          100

```

&lt;210&gt; 1979

&lt;211&gt; 5530

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1979

```

ncttgactca atcctgcaag caagtgtgtg tgtgtcccca tccccgccc cgtaaacttc
60
atagcaaata acaaataccc ataaagtcac agtcgcgcag cccctccccg cgggcagcgc
120
actatgctgc tcgggtgggc gtccctgctg ctgtgcgcgt tccgcctgcc cctggccgcg
180
gtcggccccg ccgcgacacc tgcccaggat aaagccgggc agcctccgac tgctgcagca
240
gccgcccagc ccgcgcggcg gcagggggag gaggtgcagg agcgagccga gcctcccggc
300
caccgcacc ccctggcgca gcggcgagg agcaaggggc tggcgcagaa catcgaccaa
360
ctctactccg gcggcgcaa ggtgggctac ctctctacg cgggcggccg gaggttcctc
420
ttggacctgg agcgagatgg ttccgtgggc attgctggct tcgtgcccgc agggaggcgg
480
acgagtgcgc cctggcgcca ccggagccac tgcttctatc ggggcacagt ggacgctagt
540
ccccgtctc tggtgtctt tgacctctgt gggggtctcg acggcttctt cgcggtaag
600
cacgcgcgct acaccctaaa gccactgctg cgcggaccct gggcgaggga agaaaagggg
660
cgcgtgtacg gggatgggtc cgcacggatc ctgcacgtct acaccgcag ggcttcagct
720
tcgaggccct gccgcgcgc gccagctgcg aaaccccgcc gtccacaccg gagggccacg
780
agcatgctcc ggcgcacagc aaccgagcg gacgcgcagc acgcctcgca gctcttgga
840
cagtcgcgtc tctcgcccgc tgggggctca ggaccgcaga cgtggtggcg gcggcggcgc
900
cgctccatct cccgggcccg ccaggtggag ctgcttctgg tggctgacgc gtccatggcg
960

```

cggttgatg gccggggcct gcagcattac ctgctgaccc tggcctccat cgccaatagg  
1020  
ctgtacagcc atgctagcat cgagaaccac atccgcctgg ccgtggtgaa ggtgggtggtg  
1080  
ctaggcgaca aggacaagag cctggaagtg agcaagaacg ctgccaccac actcaagaac  
1140  
ttttgcaagt ggcagcacca acacaaccag ctgggagatg accatgagga gcactacgat  
1200  
gcagctatcc tgtttactcg ggaggattta tgtgggcac c attcatgtga caccctggga  
1260  
atggcagacg ttgggacat atgttctcca gagcgcagct gtgctgtgat tgaagacgat  
1320  
ggcctccacg cagccttcac tgtggctcac gaaatcggac atttacttgg cctctcccat  
1380  
gacgattcca aattctgtga agagaccttt ggttccacag aagataagcg cttaatgtct  
1440  
tccatcctta ccagcattga tgcattcaag ccctgggtcca aatgcacttc agccaccatc  
1500  
acagaattcc tggatgatgg ccattggtaac tgtttgctgg acctaccacg aaagcagatc  
1560  
ctgggccccg aagaactccc aggacagacc tacgatgcc cccagcagtg caacctgaca  
1620  
ttcgggcctg agtactccgt gtgtcccggc atggatgtct gtgctgcct gtggtgtgct  
1680  
gtggtacgcc agggccagat ggtctgtctg accaagaagc tgcctgcggt ggaagggacg  
1740  
ccttgtggaa aggggagaat ctgcctgcag ggcaaagtgt tggacaaaac caagaaaaaa  
1800  
tattattcaa cgtcaagcca tggcaactgg ggatcttggg gatcctgggg ccagtgttct  
1860  
cgctcatgtg gaggaggagt gcagtttgcc tatcgtcact gtaataaccc tgctcccaga  
1920  
aacaacggac gctactgcac agggagagg gccatctacc actcctgcag tctcatgccc  
1980  
tgcccccca atggtaaatc atttcgtcat gaacagtgtg aggccaaaaa tggtatcag  
2040  
tctgatgcaa aaggagtcaa aacttttgtg gaatgggttc ccaaatatgc aggtgtcctg  
2100  
ccagcggatg tgtgcaagct gacctgcaga gccaaaggca ctggctacta tgtggtatct  
2160  
tctccaaagg tgaccgatgg cactgaatgt aggccgtaca gtaattccgt ctgcgtccg  
2220  
gggaagtgtg tgagaactgg ctgtgacggc atcattggct caaagctgca gtatgacaag  
2280  
tgcggagtat gtggaggaga caactccagc tgtacaaaga ttgttggaac ctttaataag  
2340  
aaaagtaagg gttactactga cgtgggtagg attcctgaag gggcaaccca cataaaagtt  
2400  
cgacagttca aagccaaaaga ccagactaga ttcactgcct atttagccct gaaaaagaaa  
2460  
aacgggtgagt accttatcaa tggaaagtac atgatctcca cttcagagac tatcattgac  
2520  
atcaatggaa cagtcatgaa ctatagcggg tggagccaca gggatgactt cctgcatggc  
2580

atgggctact ctgccacgaa ggaaattcta atagtgcaga ttcttgcaac agacccact  
2640  
aaaccattag atgtccgtta tagctttttt gttcccaaga agtccactcc aaaagtaaac  
2700  
tctgtcacta gtcattggcag caataaagtg ggatcacaca ctctgcagcc gcagtgggtc  
2760  
acggggcccat ggctcgctg ctctaggacc tgtgacacag gttggcacac cagaacggtg  
2820  
cagtgccagg atggaaaccg gaagtttagca aaaggatgtc ctctctccca aaggccttct  
2880  
gcgtttaagc aatgcttggt gaagaaatgt tagcctgtgg ttatgatctt atgcacaaag  
2940  
ataattggag gattcagcac cgatgcagtc gtggtgaaca ggaggcttac ctaacgcaca  
3000  
gaaagtcatg cttcagtgc attgtcaaca ggagtccaat tatgggcaga atctgctctc  
3060  
tgtgacccaa agaggatgtg cactgcttca cgtgacagtg gtgaccttgc aatatagaaa  
3120  
aacttgggag ttattgaaca tccctgggc ttacaagaaa cactgatgaa tgtaaaatca  
3180  
ggggacattt gaagatggca gaactgtctc ccccttgta cctacctctg atagaatgtc  
3240  
tttaattgta tcataatcat ttccacccat aatacacagt agcttcttct tactgtttgt  
3300  
aaatacattc tcccttggtg tgtcacttta tatccctgg ttctattaaa atatccatat  
3360  
atatttctat aaaaaaagtg ttgacccaa gtaggtctgc agctatttca acttccttcc  
3420  
gtttccagaa agagctgtgg atattttact ggaaattaag aacttgctgc tgttttaata  
3480  
agatgtagta tttttctga ctacaggaga taaaatttca gtcaaaaaac cattttgaca  
3540  
gcaagtatct tctgagaaat ttgaaaagt aaatagatct cagtgtatct agtcacttaa  
3600  
atacatcac ggggttcattt acttaaacct ttgactgcct gtattttttt caggtagcta  
3660  
gccaaattaa tgcataattt cagatgtaga agtagggttt gcgtgtgtgt gtgtgatcat  
3720  
actcaagagt ctaaaaacta gtttccttgt gttggaaatt taaaaggaaa aaaatcgtat  
3780  
ttcactgtgt tttcaattta tattttcaca actactttct ctctccagag ctttcactctg  
3840  
atatctcaca atgtatgata tacgtacaaa acacacagca agttttctat catgtccaac  
3900  
acattcaaca ctggtatacc tctaccagc aagcctttaa atgcatttg tgtttgctta  
3960  
tttgttttgt tcaagggttc agtaagacct acaatgtttt gtattttctg acttatttta  
4020  
ttagaaacat taaagatcac ttggtagtta gccacattga gaagtggta tcattgttaa  
4080  
tgtggttaat gccaaaaagt ggttaatat aataagactg tttccacacc ataggcaata  
4140  
atttcttaat ttaaaaaatc taagtatat cctattgtac taaatatatt tcccaactgg  
4200



aaagcacttg attgtacccg taagtgtttg agtgaatgaca tgtgatgatt ttcagaaagt  
4260  
tggtgttttt gtttccatag cctgtttaag taggttgtaa gtttgaatag ttagacatgg  
4320  
aaattatttt ataagcacac acctaaagat atcttttttag atgataaaat gtacaccccc  
4380  
ccatcaccaa cctcacaact tagaaaatct aagttgtttg atttcattgg gatttctttt  
4440  
gttgtaaac actgcaaagc caatttttct ttataaaaat tcatagtaat cctgccaaat  
4500  
gtgcctattg ttaaagattt gcatgtgaag atcttaggga accactgttt gagttctaca  
4560  
agctcatgag agtttatttt tattataaga tgtttttaat gtaaaagaat tatgtaactg  
4620  
atcactatat tacatcatth cagtgggcca ggaaaataga tgtcttgctg ttttcagtat  
4680  
tttcttaaga aattgctttt aaaacaaata attgttttac aaaaccaata attatccttt  
4740  
gaattttcat agactgactt tgctttcgac gtagaaattt ttttttctta ataaattatc  
4800  
actttgagaa atgaggcctg tacaaggctg ataacctata tgtgatggag atcacccaat  
4860  
gccaaaggga gaaagcaaac ctagttaaat aggtgagaaa aaaaataata atcccagtgc  
4920  
catttgtctg tgcaaagaga attaggagag aggttaatgt tacttttttc cattttggaa  
4980  
ataattttta tcaagtaact caaatgtgac aaaatttatt tttatttttt gtggttatat  
5040  
tcccaacaac attaaaaaat actcgaggca taaatgtagt tgtctctac tctgcttctc  
5100  
ttactatact catacatttt taatatggtt tatcaatgat tcatgtttcc ctcaaatagt  
5160  
gatggtttac acctgtcatg gaaacaatcc tagagagctc agagcaatta aaccactatt  
5220  
ccatgctttt aagtagtttt ctccaccttt ttcttatgag tctcactaga ttgactgagg  
5280  
aatgtatgtc taaattcctg gagaagatga tatggattgg aaactgaaat tcagagaaat  
5340  
ggagtgttca atagatacca cgaattgtga acaaaggga aattctatac aactcaatct  
5400  
aagtcagtc accttgactt cgtactgtct ttcaccttc cattgttgca tcttgaattt  
5460  
tttaaatgt ctagaattca ggatgctagg ggctacttct ccaaaaaaaaa aaaaaaaaaa  
5520  
aaaaaaaaaa  
5530

&lt;210&gt; 1980

&lt;211&gt; 929

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1980

Met Leu Leu Gly Trp Ala Ser Leu Leu Leu Cys Ala Phe Arg Leu Pro

1	5	10	15
Leu Ala Ala Val Gly Pro Ala Ala Thr Pro Ala Gln Asp Lys Ala Gly			
20	25	30	
Gln Pro Pro Thr Ala Ala Ala Ala Gln Pro Arg Arg Arg Gln Gly			
35	40	45	
Glu Glu Val Gln Glu Arg Ala Glu Pro Pro Gly His Pro His Pro Leu			
50	55	60	
Ala Gln Arg Arg Arg Ser Lys Gly Leu Val Gln Asn Ile Asp Gln Leu			
65	70	75	80
Tyr Ser Gly Gly Gly Lys Val Gly Tyr Leu Val Tyr Ala Gly Gly Arg			
85	90	95	
Arg Phe Leu Leu Asp Leu Glu Arg Asp Gly Ser Val Gly Ile Ala Gly			
100	105	110	
Phe Val Pro Ala Gly Gly Gly Thr Ser Ala Pro Trp Arg His Arg Ser			
115	120	125	
His Cys Phe Tyr Arg Gly Thr Val Asp Ala Ser Pro Arg Ser Leu Ala			
130	135	140	
Val Phe Asp Leu Cys Gly Gly Leu Asp Gly Phe Phe Ala Val Lys His			
145	150	155	160
Ala Arg Tyr Thr Leu Lys Pro Leu Leu Arg Gly Pro Trp Ala Glu Glu			
165	170	175	
Glu Lys Gly Arg Val Tyr Gly Asp Gly Ser Ala Arg Ile Leu His Val			
180	185	190	
Tyr Thr Arg Arg Ala Ser Ala Ser Arg Pro Cys Arg Arg Ala Pro Ala			
195	200	205	
Ala Lys Pro Pro Arg Pro His Arg Arg Pro Thr Ser Met Leu Arg Arg			
210	215	220	
Thr Ala Thr Arg Ala Asp Ala Gln His Ala Ser Gln Leu Leu Asp Gln			
225	230	235	240
Ser Ala Leu Ser Pro Ala Gly Gly Ser Gly Pro Gln Thr Trp Trp Arg			
245	250	255	
Arg Arg Arg Arg Ser Ile Ser Arg Ala Arg Gln Val Glu Leu Leu Leu			
260	265	270	
Val Ala Asp Ala Ser Met Ala Arg Leu Tyr Gly Arg Gly Leu Gln His			
275	280	285	
Tyr Leu Leu Thr Leu Ala Ser Ile Ala Asn Arg Leu Tyr Ser His Ala			
290	295	300	
Ser Ile Glu Asn His Ile Arg Leu Ala Val Val Lys Val Val Val Leu			
305	310	315	320
Gly Asp Lys Asp Lys Ser Leu Glu Val Ser Lys Asn Ala Ala Thr Thr			
325	330	335	
Leu Lys Asn Phe Cys Lys Trp Gln His Gln His Asn Gln Leu Gly Asp			
340	345	350	
Asp His Glu Glu His Tyr Asp Ala Ala Ile Leu Phe Thr Arg Glu Asp			
355	360	365	
Leu Cys Gly His His Ser Cys Asp Thr Leu Gly Met Ala Asp Val Gly			
370	375	380	
Thr Ile Cys Ser Pro Glu Arg Ser Cys Ala Val Ile Glu Asp Asp Gly			
385	390	395	400
Leu His Ala Ala Phe Thr Val Ala His Glu Ile Gly His Leu Leu Gly			
405	410	415	
Leu Ser His Asp Asp Ser Lys Phe Cys Glu Glu Thr Phe Gly Ser Thr			
420	425	430	
Glu Asp Lys Arg Leu Met Ser Ser Ile Leu Thr Ser Ile Asp Ala Ser			

435				440				445							
Lys	Pro	Trp	Ser	Lys	Cys	Thr	Ser	Ala	Thr	Ile	Thr	Glu	Phe	Leu	Asp
450						455					460				
Asp	Gly	His	Gly	Asn	Cys	Leu	Leu	Asp	Leu	Pro	Arg	Lys	Gln	Ile	Leu
465				470						475					480
Gly	Pro	Glu	Glu	Leu	Pro	Gly	Gln	Thr	Tyr	Asp	Ala	Thr	Gln	Gln	Cys
				485					490					495	
Asn	Leu	Thr	Phe	Gly	Pro	Glu	Tyr	Ser	Val	Cys	Pro	Gly	Met	Asp	Val
			500					505					510		
Cys	Ala	Arg	Leu	Trp	Cys	Ala	Val	Val	Arg	Gln	Gly	Gln	Met	Val	Cys
	515						520					525			
Leu	Thr	Lys	Lys	Leu	Pro	Ala	Val	Glu	Gly	Thr	Pro	Cys	Gly	Lys	Gly
	530					535					540				
Arg	Ile	Cys	Leu	Gln	Gly	Lys	Cys	Val	Asp	Lys	Thr	Lys	Lys	Lys	Tyr
545				550					555						560
Tyr	Ser	Thr	Ser	Ser	His	Gly	Asn	Trp	Gly	Ser	Trp	Gly	Ser	Trp	Gly
				565					570					575	
Gln	Cys	Ser	Arg	Ser	Cys	Gly	Gly	Gly	Val	Gln	Phe	Ala	Tyr	Arg	His
			580					585					590		
Cys	Asn	Asn	Pro	Ala	Pro	Arg	Asn	Asn	Gly	Arg	Tyr	Cys	Thr	Gly	Lys
	595						600						605		
Arg	Ala	Ile	Tyr	His	Ser	Cys	Ser	Leu	Met	Pro	Cys	Pro	Pro	Asn	Gly
	610					615					620				
Lys	Ser	Phe	Arg	His	Glu	Gln	Cys	Glu	Ala	Lys	Asn	Gly	Tyr	Gln	Ser
625					630					635					640
Asp	Ala	Lys	Gly	Val	Lys	Thr	Phe	Val	Glu	Trp	Val	Pro	Lys	Tyr	Ala
			645						650					655	
Gly	Val	Leu	Pro	Ala	Asp	Val	Cys	Lys	Leu	Thr	Cys	Arg	Ala	Lys	Gly
			660					665					670		
Thr	Gly	Tyr	Tyr	Val	Val	Phe	Ser	Pro	Lys	Val	Thr	Asp	Gly	Thr	Glu
	675					680						685			
Cys	Arg	Pro	Tyr	Ser	Asn	Ser	Val	Cys	Val	Arg	Gly	Lys	Cys	Val	Arg
	690				695						700				
Thr	Gly	Cys	Asp	Gly	Ile	Ile	Gly	Ser	Lys	Leu	Gln	Tyr	Asp	Lys	Cys
705					710					715					720
Gly	Val	Cys	Gly	Gly	Asp	Asn	Ser	Ser	Cys	Thr	Lys	Ile	Val	Gly	Thr
			725						730					735	
Phe	Asn	Lys	Lys	Ser	Lys	Gly	Tyr	Thr	Asp	Val	Val	Arg	Ile	Pro	Glu
			740					745					750		
Gly	Ala	Thr	His	Ile	Lys	Val	Arg	Gln	Phe	Lys	Ala	Lys	Asp	Gln	Thr
	755					760						765			
Arg	Phe	Thr	Ala	Tyr	Leu	Ala	Leu	Lys	Lys	Lys	Asn	Gly	Glu	Tyr	Leu
	770					775					780				
Ile	Asn	Gly	Lys	Tyr	Met	Ile	Ser	Thr	Ser	Glu	Thr	Ile	Ile	Asp	Ile
785					790					795					800
Asn	Gly	Thr	Val	Met	Asn	Tyr	Ser	Gly	Trp	Ser	His	Arg	Asp	Asp	Phe
			805						810					815	
Leu	His	Gly	Met	Gly	Tyr	Ser	Ala	Thr	Lys	Glu	Ile	Leu	Ile	Val	Gln
			820					825					830		
Ile	Leu	Ala	Thr	Asp	Pro	Thr	Lys	Pro	Leu	Asp	Val	Arg	Tyr	Ser	Phe
	835					840						845			
Phe	Val	Pro	Lys	Lys	Ser	Thr	Pro	Lys	Val	Asn	Ser	Val	Thr	Ser	His
	850					855				860					
Gly	Ser	Asn	Lys	Val	Gly	Ser	His	Thr	Ser	Gln	Pro	Gln	Trp	Val	Thr

```

865          870          875          880
Gly Pro Trp Leu Ala Cys Ser Arg Thr Cys Asp Thr Gly Trp His Thr
          885          890          895
Arg Thr Val Gln Cys Gln Asp Gly Asn Arg Lys Leu Ala Lys Gly Cys
          900          905          910
Pro Leu Ser Gln Arg Pro Ser Ala Phe Lys Gln Cys Leu Leu Lys Lys
          915          920          925
Cys

```

<210> 1981  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1981
tcataaatgg tgtacaggcc ttttctggtg ccttcggcga tgggcgatcc gggatccggt
60
ggcgccgcta ctttgaacga gtctatgtgc gcaagcaggc ttggcgtaa cccgcgtggg
120
gtcgataatc gcacgtcaat ggccgtgttt tcgccgcaa aagctgccgg aggcggggcg
180
tgcccggggc cttgccgaat aatggcttgg ccggggcaac gggcctcatc gtcgggacgg
240
gggcgtggcc cggcgctgtc ggaatgggcg tcttgcttga atggttcaaa agtgcgcgcg
300
ggctcgccgg gctcggaggc ggacgcn
327

```

<210> 1982  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1982
Met Val Tyr Arg Pro Phe Leu Val Pro Ser Ala Met Gly Asp Pro Gly
1      5      10      15
Ser Val Gly Ala Ala Thr Leu Asn Glu Ser Met Cys Ala Ser Arg Leu
20     25     30
Gly Val Asn Pro Arg Gly Val Asp Asn Arg Thr Ser Met Ala Val Phe
35     40     45
Ser Pro Pro Lys Ala Ala Gly Gly Gly Arg Cys Pro Gly Pro Cys Arg
50     55     60
Ile Met Ala Trp Pro Gly Gln Arg Ala Ser Ser Ser Gly Arg Gly Arg
65     70     75     80
Gly Pro Ala Leu Ser Glu Trp Ala Ser Cys Leu Asn Gly Ser Lys Val
85     90     95
Arg Ala Gly Ser Pro Gly Ser Glu Ala Asp Ala
100    105

```

<210> 1983  
 <211> 383  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1983

ttcaacaaca tgggtgcatga gctgcgcgaa caacagcata taaaagacct attccgccaa  
 60  
 cacgtgggggt caaaaattgc tgatcaggcg ctctctgctc agcctgaaga acgaaacgtc  
 120  
 ccaaagcgag acgcttctgt cttcttttatt gacattattg ggtctacaaa gtcagttta  
 180  
 gaatacgaca gttacaccgt tggtagacctg ctcaatcgct tctacacaat tggtagtagag  
 240  
 gaagttaatc gtgcagggtgg agtcgttaat aaattcgccg gcgatgcagt actagccatt  
 300  
 tttaatgtcc cgcacgatca cccggatcca gcaggcgcat cactctattg cgctcgggta  
 360  
 gttatgaacc gtttcgatca tga  
 383

&lt;210&gt; 1984

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1984

Phe	Asn	Asn	Met	Val	His	Glu	Leu	Arg	Glu	Gln	Gln	His	Ile	Lys	Asp
1				5					10					15	
Leu	Phe	Arg	Gln	His	Val	Gly	Ser	Lys	Ile	Ala	Asp	Gln	Ala	Leu	Ser
			20					25					30		
Ala	Gln	Pro	Glu	Glu	Arg	Asn	Val	Pro	Lys	Arg	Asp	Ala	Ser	Val	Phe
		35					40					45			
Phe	Ile	Asp	Ile	Ile	Gly	Ser	Thr	Lys	Leu	Ser	Leu	Glu	Tyr	Asp	Ser
	50					55					60				
Tyr	Thr	Val	Val	Asp	Leu	Leu	Asn	Arg	Phe	Tyr	Thr	Ile	Val	Val	Glu
65				70					75				80		
Glu	Val	Asn	Arg	Ala	Gly	Gly	Val	Val	Asn	Lys	Phe	Ala	Gly	Asp	Ala
			85						90				95		
Val	Leu	Ala	Ile	Phe	Asn	Val	Pro	His	Asp	His	Pro	Asp	Pro	Ala	Gly
		100					105					110			
Ala	Ser	Leu	Tyr	Cys	Ala	Arg	Val	Val	Met	Asn	Arg	Phe	Asp	His	
		115					120					125			

&lt;210&gt; 1985

&lt;211&gt; 381

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1985

actagtgatg ggtacttggt gtggctttgc aatcccatcc ggcacttgat caaaacgctt  
 60  
 tagctgcagc ttgttagcac gtcggataag cgtttgctca tctgccgttt gggctgtttc  
 120  
 atccgattca aatactcgag tgtcagcgaa tggcctggcg aagggtggtg gtctaccccc  
 180  
 tggacccac attgggttcgc aggccttata acccttgatg cgatccaggc ccatttgaac  
 240

cagaaccgaa gaaatatttt gcatgcgaaa ctcaattgag ccttcagtag ggccaaccaa  
 300  
 tggtcctcgg cgcagtaate gattttcatg ggttttggtg aaagacagtg cctctcttttc  
 360  
 ccacgccagc attttgaggt a  
 381

<210> 1986  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 1986  
 Met Leu Ala Trp Glu Lys Arg Ala Leu Ser Phe Thr Lys Ala His Glu  
 1 5 10 15  
 Asn Arg Leu Leu Arg Gln Gly Pro Leu Val Gly Arg Thr Glu Gly Ser  
 20 25 30  
 Ile Glu Phe Arg Met Gln Asn Ile Ser Ser Val Leu Val Gln Met Gly  
 35 40 45  
 Leu Asp Arg Ile Lys Gly Tyr Lys Ala Cys Glu Pro Met Trp Gly Pro  
 50 55 60  
 Gly Gly Arg Pro Thr Thr Phe Ala Arg Pro Phe Ala Asp Thr Arg Val  
 65 70 75 80  
 Phe Glu Ser Asp Glu Thr Ala Gln Thr Ala Asp Glu Gln Thr Leu Ile  
 85 90 95  
 Arg Arg Ala Asn Lys Leu Gln Leu Lys Arg Phe Asp Gln Val Pro Asp  
 100 105 110  
 Gly Ile Ala Lys Pro Gln Gln Val Pro Ile Thr Ser  
 115 120

<210> 1987  
 <211> 419  
 <212> DNA  
 <213> Homo sapiens

<400> 1987  
 aagcttgctg cccatgggtca ccttgacgag cgtctgggac gagatttcga cctcgagacg  
 60  
 cttgcagctg ccttcgaccc cactcgtgac gacctcatcg gggtcatggg cgtgcgcacc  
 120  
 atgatcaacc gttatctctt gcgcactccc gataagcagg ctttggaggt accgcagtag  
 180  
 ttctggatgc gcgtcgcgat ggggctgagc ctactgagg acgateccac ttctcggcc  
 240  
 ncctgccttt acgactccat gagcaacctg cgccacctgg ccgctggatc cacccttgct  
 300  
 aatgcgggga cccatncggc tcagctatct aactgcttcg tcatgcgcac tgaggacaat  
 360  
 ctggagcaca tcgccagac gatccgcgac gtcattgtga tcaccaaggg caccgtcgn  
 419

<210> 1988  
 <211> 139  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1988

Lys Leu Val Ala Asp Gly His Leu Asp Glu Arg Leu Gly Arg Asp Phe  
 1 5 10 15  
 Asp Leu Glu Thr Leu Ala Ala Ala Leu Asp Pro Thr Arg Asp Asp Leu  
 20 25 30  
 Ile Gly Phe Met Gly Val Arg Thr Met Ile Asn Arg Tyr Leu Leu Arg  
 35 40 45  
 Thr Pro Asp Lys Gln Ala Leu Glu Val Pro Gln Tyr Phe Trp Met Arg  
 50 55 60  
 Val Ala Met Gly Leu Ser Leu Thr Glu Asp Asp Pro Thr Ser Ser Ala  
 65 70 75 80  
 Xaa Cys Leu Tyr Asp Ser Met Ser Asn Leu Arg His Leu Ala Ala Gly  
 85 90 95  
 Ser Thr Leu Val Asn Ala Gly Thr His Xaa Ala Gln Leu Ser Asn Cys  
 100 105 110  
 Phe Val Met Arg Thr Glu Asp Asn Leu Glu His Ile Ala Gln Thr Ile  
 115 120 125  
 Arg Asp Val Met Trp Ile Thr Lys Gly Thr Val  
 130 135

&lt;210&gt; 1989

&lt;211&gt; 10795

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1989

ccagagcccc ctgcgccccaa aggtcactgg gactatttgt gcgaagagat gcagtggtctc  
 60  
 tctgctgact ttgctcagga gcgcggttg aaacgggggtg tggcccgga ggtggtgcgc  
 120  
 atggtgatcc ggcaccacga ggagcagcgg cagaaagagg aacgggcccg gagggaggag  
 180  
 caggccaagc tgcgtcgaat tgcttccacc atggccaagg atgtcaggca gttctggagc  
 240  
 aatgtggaga aggtggtgca attcaagcaa cagtcccggc ttgaggaaaa gcgcaaaaaa  
 300  
 gccctggacc tgcatttggc cttcattgtg gggcaaaactg aaaagtactc ggaccttctg  
 360  
 tctcagagcc tcaaccagcc attaacctcc agcaaagcag gctcttcccc ttgcctcggc  
 420  
 tcttctccag ctgcctccag tctccaccc cctgcttctc gcctggatga tgaagatggg  
 480  
 gactttcaac cccaagagga tgaggaagag gatgatgagg aaacgattga agttgaagaa  
 540  
 caacaggaag gcaatgatgc agaggcccag aggcgtgaga ttgagctgct tcgccgtgag  
 600  
 ggagaattgc cactggaaga gctgctccgt tcccttcccc ctgagctgtt ggaagggcct  
 660  
 tccagccct ctcaaaccct ctcatctcat gatagtga cccgagatgg gcctgaagaa  
 720  
 ggtgctgaag aagagccccc tcaggtgttg gagataaagc cccaccctc tgctgtcaca  
 780

cagcgcaaca aacagccttg gcatccagat gaagatgatg aagagtttac tgccaacgaa  
840  
gaggaagcgg aggatgaaga ggatactata gcagctgagg aacagttgga aggggagggtg  
900  
gatcatgcca tggagctgag cgagttggct cgagaagggtg agctttccat ggaggagcta  
960  
ttgcagcagt atgcaggagc ctatgccccca ggctctggga gcagtgaaga tgaggatgaa  
1020  
gatgagggtt atgctaata tagctgactgt gaaccagagg ggcccggtga agcggagag  
1080  
cctcctcagg aggatagtag cagtcagtca gactctgttg aggaccggag tgaggatgag  
1140  
gaagatgaac attcagagga ggaagaaaca agtgaaggtt cagcatcaga ggaatctgag  
1200  
tctgaagagt ctgaggatgc ccaatcacag agccaagcag atgaagagga ggaagatgat  
1260  
gattttgggg tggagtactt gcttgccagg gatgaagagc agagtgaggc agatgcaggc  
1320  
agtgggcctc ctactccagg gccactact ctaggtccaa agaaagaaat tactgacatt  
1380  
gctgcagcag ctgaaagtct ccagcccaag gggtacacgc tggccacgac ccaggtaaag  
1440  
acgcccattc ccctgcttct gcggggccag ctccgggagt accagcacat tgggctagac  
1500  
tggttggtta ccatgtatga gaagaagctt aatggcattc ttgtgatga gatggggctt  
1560  
gggaagacca tccagaccat ctctctgctt gccacttgg cttgtgagaa aggttaactgg  
1620  
ggtccccatt taatcattgt tcccaccagc gtgatgttga actgggagat ggagttgaaa  
1680  
cgttggtgcc ccagctttaa aatcctcact tactatggag cccagaaaga gaggaagctc  
1740  
aagcggcagg gctggaccaa gcccaatgcc ttatcatgtt gtatcacatc ttacaagctg  
1800  
gtgctgcagg accaccaggc cttccgtcgc aagaactggc gctatctcat tctggatgag  
1860  
gcgcagaaca tcaagaactt caagtcacag cgctggcagt cactcctcaa cttcaacagc  
1920  
cagagacgcc tgctcctgac aggaactccc ttgcagaaca gcctcatgga gctgtggtcc  
1980  
ttgatgcact ttttgatgcc ccatgtcttc cagtctcatc gcgagttcaa ggagtgggtc  
2040  
tctaataccc taactggcat gattgagggc agccaagagt ataataagagg tctagtcaaa  
2100  
cgccctcaca aggttttgag gcctttttta ctgcgccgag ttaagggtga tgttgagaag  
2160  
cagatgcccc aaaagtacga gcatgttatc cgctgcaggc tctccaagcg tcaacgctgt  
2220  
ctctatgatg acttcatggc acagaccaca actaaggaga cactagccac aggccatttc  
2280  
atgagcgtca tcaacatttt gatgcagctg agaaaagttt gcaatcatcc aaatctgttc  
2340  
gacctcgac cggttacctc ccctttcatc accccaggca tctgcttcag caccgcctct  
2400



ctggtgctaa gggccacgga tgtccatccc ctccagcgga tagacatggg tcgatttgac  
2460  
cttattggcc tggaaggctg tgtctctcga tatgaggcag acacatttct gccccggcac  
2520  
cgctctctc gccgggtact gttagaagtg gctactgctc ctgaccccc accccggccc  
2580  
aagccagtca agatgaaggt caacaggatg ctgcagccag tacctaagca agaaggccgg  
2640  
acagtgggtg tggatgaaca cccacgggag cccctgggac ctgtcccagt tcgacctcct  
2700  
ccaggtcctg agctctcagc ccagcccacc cctggcccag tcccccaagt gctgccagca  
2760  
tactgatgg ttccagctc acctgccggg cccccgctta ttctgcac tcggcctcct  
2820  
ggcctgtcc tcttgctcc actgcagccc aacagtgggt ctctcccca ggtgttgcca  
2880  
tccccctgg gggctctgag tgggacctca cggctccca cgccaacctt gtcctaaag  
2940  
ccaacaccac ctgccccagt tcgctgagc ccagccccac ctccaggccc ctctagcctg  
3000  
ttgaagcccc tgacagtgcc accaggctac acctccctc ctgtgtgtgc caccaccact  
3060  
tctaccacca cggcaactgc taccaccaca gcagtgccag ctccgactcc tgcaccacag  
3120  
cgctcattc tatctccga tatgcaggct cgctgcctc caggcgaagt ggtcagcacc  
3180  
gggcagttag cctcactggc acaacgtcca gtggctaagt cagggggaag caaacctctc  
3240  
accttccaaa tccagggcaa caagctgact ttgactgggt cccagggtgc ccagcttgc  
3300  
gtggggcagc cccgcccgt gcaaatgcca ccaaccatgg tgaataatac aggcgtgggtg  
3360  
aagattgtag tgagacaagc ccctcgggat ggactgactc ctgttctcc attggcccca  
3420  
gcaccccgcc ctccgagctc tgggtctcca gctgtgttga atccagccc caggttaacc  
3480  
cctggccggc taccacacc tactctgggt actgctcag ccccatgcc cacaccact  
3540  
ctggtgagc ctcttctcaa gctgggtccac agtccttcac ctgaagtcag tgcttcagcc  
3600  
cccggagctg ccccttgac catctcttct cctctccag tgccatctc actcctggg  
3660  
ccagctctt ctccaatgcc aattcccaac tctctcccc ttgctagtcc tgtgtcctct  
3720  
acagtctcag ttccattgtc atcttctc cccatctctg tccccaccac acttctgccc  
3780  
ccagctcgg ctccactcac catcccatc tcagccccct tgactgttcc tgcttcgggc  
3840  
ccagctctgt tgaccagtgt gactccacca ttggcacctg ttgtcccagc ggctcctgga  
3900  
cctccctct tggcaccatc tgggtgcttc ccgtcagcat cagccttgac tctaggtttg  
3960  
gccacagctc catccctgtc ttcattctcag acacctgggc accctctgtt gttggctccc  
4020

acctcttcac atgttccagg gttgaactca accgtggccc cagcatgctc acctgtcctg  
4080  
gtgccagctt eggtcttgcc cagtcccttt ccgtcagcac caaatccagc tccagctcag  
4140  
gcttcccttc tggctccagc atcttctgca tctcaggctc tagccacccc tctggtcctt  
4200  
atggcggtc caccagacagc aattctggct ccttctccag ctctctctct ggtcctctct  
4260  
ccggtcctgg caccatcgcc aggtgctgct cctgtcctgg ctccatcaca gactccggtt  
4320  
ccagttatgg ctccatcgct tactccagga acctctttag cctcagcttc accggtacca  
4380  
gtcccaaccc ctgtgttgge tccatcatca actcaaaacta tgctaccagc cccggttcgg  
4440  
tcacctctcc cgagcccgcc ttctacgcag aactggccc tagccccagc tttagacccc  
4500  
actcttgagg gctcatctcc atctcagaca ctctctttgg gaacggggaa ccccaggga  
4560  
ccctttccaa ctccagacatt gtcattaact ccagcatcat ccctgggtacc aactccagcc  
4620  
cagacactgt ctttggcacc aggaccacca ctgggtccaa ctccagacgt gtctctggct  
4680  
ccagcacccc ctctggctcc agcttctcca gtgggcccag cccagctca cacgtgact  
4740  
ttggctccag catcgctatc tgcttctctc ctggccccag ctccagtgc gacactgacc  
4800  
ttgagcctg ccccgattcc taccctgggc ccggccgcag ctccagacctt ggcgtggcc  
4860  
ccagctcca caccagtcctc agcttcccag gcattctccc ttgtggttcc ggcattctgt  
4920  
gcgctccct tgctgtcac catggtatcc cggtgctg tttccaagga tgagcctgac  
4980  
aactgacat tgcgtctg tccccccagc cctccctcca ctgctacctc gtttgggtggc  
5040  
ccccggctc gacgccagcc cccccacca cctcgttccc ctttttatct ggactccctg  
5100  
gaggaaaagc ggaagcggca gcggtctgaa cgctggaac ggattttcca acttagtgag  
5160  
gctcatggg ccctggcacc tgtgtatggg actgaagtcc tggatttctg taccctgccc  
5220  
caacctgtt ccagccccat cggccctcgt tctcttgccc ccagccaccc caccttttgg  
5280  
acttataccg aggtgcccc cgggctgta ctgtttcccc agcagcgact agaccagctg  
5340  
tcagaaatca ttgagaggtt catctttgtc atgcctcctg tggaggcacc tcccccttc  
5400  
ctgcatgcct gccaccacc tcttggctg gccccacgtc aggcagcctt ccaggagcaa  
5460  
ttggcctctg agctctggcc cgggctcgt cctttgcacc gtattgtgtg taacatgcgc  
5520  
accagttcc ctgacttaag actcatccag tatgattgcg gaaagttgca gacgttggca  
5580  
gtgctgttg gccagctcaa ggcagagggc caccgagtgc tcatcttcac ccagatgacc  
5640

cgaatgctgg atgtattgga gcagtttctc acctaccatg gccatctcta cctgcgcctg  
5700  
gatggatcta ctagagttga acagagacag gccttgatgg aacggttcaa tgcagacaaa  
5760  
cgcataattct gcttcatect ttcaactcgg agtgggggtg tgggcgtgaa cctgacagga  
5820  
gcagacactg ttgtttttta tgacagcgac tggaatecca ccatggatgc tcaggcccag  
5880  
gaccgctgtc accgaattgg ccagaccggg gatgtccaca tatataggct tatcagtga  
5940  
cggacagtgg aggagaacat cctaaaaaag gcaaatcaga agagaatgtt gggggacatg  
6000  
gccattgagg gaggcaactt caccacagcc tatttcaaac agcagaccat ccgagagctg  
6060  
tttgatatgc ccctggagga accttctagc tcatccgtgc cctctgcccc tgaagaggag  
6120  
gaagagactg tggccagcaa gcagactcat attctggagc aggcattgtg tcgggcagaa  
6180  
gatgaagagg atatccgtgc agccaccag gccaaaggctg aacagggtggc tgagcttgca  
6240  
gaatttaatg agaacgatgg gtttccctgct ggtgaggagg aggaagctgg ccggcctggg  
6300  
gctgaggatg aggagatgtc ccgggctgag caggaaattg ctgccctcgt agaacagctg  
6360  
acccccattg agcgttatgc catgaaatc ctggaggcct cactggagga ggtgagccga  
6420  
gaggagctca aacaggcaga agagcaagtg gaagctgccc gcaaagacct ggaccaagcc  
6480  
aaggaggagg tgttccgcct accccaagag gaggaggagg ggccgggggc tggggatgag  
6540  
agttcctgtg ggactggtgg aggcaccac cggcgcagta aaaaggccaa agccctgag  
6600  
aggccgggga ctcgtgtcag tgagcgtctt cgtggagccc gggctgagac tcaaggggca  
6660  
aaccacactc ctgtcatatc cgcctatcaa actcgcagca ccaccacacc acccgtg  
6720  
agtccctgcca gggagcgagt tcccaggcca gcacctaggc ctgcaccac tccagcttca  
6780  
gctccggctg caattcctgc cttgttctt gtcccagttt ctgccccagt acccatttca  
6840  
gccccaaatc caataacat tctccctgtc catatcttgc cttctctctc cctccttca  
6900  
cagattcctc cttgttcttc tctgacctgc acccctctc ctgctgtac cctccacca  
6960  
gtcatatac cgctccagc ccaaacctgt cttgtaactc cttcctctcc tctcttgctt  
7020  
ggtccacctt ctgtgcccac ctctgectca gtcactaatc tccccttggg cttgaggcct  
7080  
gaggcagagc tgtgtgcccaggcattggca tctccagagt ccctggagct ggcttctgtg  
7140  
gccagttcag aaacctctc actttctctt gtgcccccta aagatctgtt gccagttgct  
7200  
gtggagatcc tgctgtgtc agagaagaac ctttctctca ccccttctgc acccagcctg  
7260

accttgagg ctggcagcat cccaatggt caagagcagg aggcaccaga ttctgctgag  
7320  
gggaccaccc ttacagtgtt gcctgaaggt gaggagtgtc ccctgtgtgt gagtgagagc  
7380  
aatggcctgg agctcccacc ctcagcagca tctgatgagc cacttcagga gccactggag  
7440  
gtgacagga cctcggaaga gctgacagag gccaaagacc caacctccag ccagagaag  
7500  
ccacaggaac tcgttacagc tgagggttga gctccatcca cctcatcttc agccacttcc  
7560  
tcgcctgagg gtccttcacc tgcccgacct cctcggcgtc gcaccagtgc tgatgtggaa  
7620  
attaggggtc aagggaactg tcggccagga caaccaccag gccccaaagt gcttcgaaag  
7680  
ctgccaggac ggctggtaac tgtggttagag gaaaaggaac tgggtgcggcg gcggcggcag  
7740  
cagcggggag ctgccagcac cctagtgcct ggggtctctg agactagtgc cagcccgga  
7800  
agcccgctctg tcgcagcat gtcaggcca gaatcctccc ctcccattgg tgggcccctg  
7860  
gaagctgctc ctcatcttc actgcccact ccacccagc agcccttcat tgctcgccgt  
7920  
cacattgagc tgggggtgac tgggtggtggc agccccgaga atggagacgg agcactgctc  
7980  
gccatcaccc cacctgctgt gaaacgtcgg agggggaggc cccccaagaa gaacaggctc  
8040  
ccagcagatg ctgggagagg tgtggatgag gcaccctcat ccaccttga gggaaaaacc  
8100  
aatggggctg acccagtcct tgggcctgag accctaattg ttgcagatcc tgtcctggaa  
8160  
ccacagctta ttctggggcc ccagcctctt ggacccagc cagttcacag acccaatccc  
8220  
ctcctgtcac ctgtggagaa aagaaggcga ggacgacccc ctaaagcacg agatttgccc  
8280  
atccctggga ccatttctc tgcaggggat ggcaactccg aaagtcggac acagccacc  
8340  
ccacacccat caccctaac cccactcca ccaactgtag ttgtccac tgctactgtt  
8400  
gccaacactg tcaccactgt caccatttca acgtccccc ccaaacggaa gaggggcccga  
8460  
cctcccaaga atcctccatc acctcgccc agccagctcc ccgtcttggc ccgtgacagc  
8520  
acttctgttc tcgagagctg tggattgggg aggcgacggc aaccccaggg ccaaggggag  
8580  
agtgagggtg gtccctctga tgaggatgga agccgcccc tcaccgcctt ggccgcctt  
8640  
cggtttgaag cagaaggaat gcgaggacgg aagagtggag ggtccatggt ggtggctgta  
8700  
attcaggatg acctggactt agcagatagc gggccaggcg ggttgaatt gacaccact  
8760  
gtggtctcac taacccaaa actgcgctcg acccggtgc gtccagggtc tctagtcccc  
8820  
ccactagaga ctgagaagtt gcctcgaaa cgagcagggg cccagttgg tgggagtcct  
8880

gggctggcaa agcggggccg cctacagccc ccaagteccc tggggcctga ggggttcagta  
8940  
gaggagtctg aggctgaagc ctcaggtagg gaggaggaag gggatgggac cccacgccga  
9000  
cgtcctggcc cccgcgggct tgttgggacc accaaccaag gggaccagcg catcctgcgc  
9060  
agcagcggcc ctcctccctt ggctggccct gctgttagtc acagaggccg caaggccaag  
9120  
acgtgagtgg gctgcccctc cacctaggct ttccaccgtg gccactccct ccatgaccag  
9180  
gcctgactct gttaaccact acttgaagtc ttgaggggga aagcctccag ggagacatag  
9240  
gggcctttct cctttctccc accaaagtag ggggtaggca actgggtgtc atggaaatgg  
9300  
ggatcatcac agtccccctc cccttcaccc cacgtggctg ggcagtgtta agggtagcaa  
9360  
gatagtctct gtccccaccc ccttgacttt gattccccag ctgtctttca cacagcccc  
9420  
cacccttagg ggaaggggga ggggcttctc tacaatgagg tttttttctt tttttttttt  
9480  
ttttaagaag aaaaaataat aaacttagtt tctgtatgag catccgcgta aggaggcttc  
9540  
tgattttctg gtctgggtga ggggtgggtg ggaacttggg catcgttttt ctctccctc  
9600  
ttgtttctgc aaagatccta gcacctgac tctagcccag gactatatgt tccaggcaga  
9660  
aatctacca agaagaggga agattggtga atttgatgtg gtaggggtgc tttccccagt  
9720  
cagtttgaag tcacagatat ccttttctc tcatttctt tccctcggtt cctagacgtt  
9780  
cctcggagct ctttgatgcc tcagacctt cccttttct cctcttctc aggtgcttcc  
9840  
tttcacaact ttttcagag ggcaggcgtc ctagctccag ttgtccatc ccttgggcc  
9900  
tcccctggct cttcatctag ccaaactggg ttgagtcagc cacacccctt cccagctccc  
9960  
tgggctcttc acgtggtggc tggccactca accccacccc tgggcttggc ttggagccct  
10020  
gagtcagctc catcaccacc caagccaaac caaagctgag gcaggagccg aaactcagag  
10080  
tccttcaagg cctatagcca ggtgatggag gacgaggaga aggcagtgga gatcttgggc  
10140  
aacacggaag ctgctcatcc tccatcccc atccgctgct gctggctccg cctccgctgc  
10200  
ttggcagcta ctagcattat ctgtggctgc tcttgccctg gagtcattgc tctgggtgtt  
10260  
gccatcaagg cggaagagcg gcataaagca ggcgggtccg aggaggcagt gcgctggggg  
10320  
gcccgggccc ggaaactcat cctggccagc tttgctgtct ggcttgcgtt cctcattctg  
10380  
ggtcccctgc tgetgtgggt gctctctac gccatcgctc aggcagtgat accctggatg  
10440  
gcctctgctg agagccagcc gagacctcct ggatcctgca atgcggcatt gctaaggctc  
10500

tgtgacagca gtggttgaa ggatcctggt tggaaggatg gggactctct caaggggctt  
 10560  
 tggaagagct cttctagccc ttataaaaag gagggcagca gctgagactg atgagaggag  
 10620  
 ggcagcctgc tctgttcttt cagggccccc caccctaccc tagccacccc  
 10680  
 tagggcctct acccagcggg aggggttgaa gaccaggcct ggttttatta gaattcattt  
 10740  
 tgtaataaaa gcctttttta gtggtaaaaa aaaaaaaaaa aaaaaaaa aaaaa  
 10795

<210> 1990

<211> 2971

<212> PRT

<213> Homo sapiens

<400> 1990

Met	Ala	Lys	Asp	Val	Arg	Gln	Phe	Trp	Ser	Asn	Val	Glu	Lys	Val	Val
1				5					10					15	
Gln	Phe	Lys	Gln	Gln	Ser	Arg	Leu	Glu	Glu	Lys	Arg	Lys	Lys	Ala	Leu
		20						25					30		
Asp	Leu	His	Leu	Asp	Phe	Ile	Val	Gly	Gln	Thr	Glu	Lys	Tyr	Ser	Asp
	35					40						45			
Leu	Leu	Ser	Gln	Ser	Leu	Asn	Gln	Pro	Leu	Thr	Ser	Ser	Lys	Ala	Gly
	50					55					60				
Ser	Ser	Pro	Cys	Leu	Gly	Ser	Ser	Ser	Ala	Ala	Ser	Ser	Pro	Pro	Pro
65				70					75					80	
Pro	Ala	Ser	Arg	Leu	Asp	Asp	Glu	Asp	Gly	Asp	Phe	Gln	Pro	Gln	Glu
			85					90					95		
Asp	Glu	Glu	Glu	Asp	Asp	Glu	Glu	Thr	Ile	Glu	Val	Glu	Glu	Gln	Gln
		100					105					110			
Glu	Gly	Asn	Asp	Ala	Glu	Ala	Gln	Arg	Arg	Glu	Ile	Glu	Leu	Leu	Arg
	115						120				125				
Arg	Glu	Gly	Glu	Leu	Pro	Leu	Glu	Glu	Leu	Leu	Arg	Ser	Leu	Pro	Pro
	130				135						140				
Gln	Leu	Leu	Glu	Gly	Pro	Ser	Ser	Pro	Ser	Gln	Thr	Pro	Ser	Ser	His
145				150					155					160	
Asp	Ser	Asp	Thr	Arg	Asp	Gly	Pro	Glu	Glu	Gly	Ala	Glu	Glu	Glu	Pro
			165					170					175		
Pro	Gln	Val	Leu	Glu	Ile	Lys	Pro	Pro	Pro	Ser	Ala	Val	Thr	Gln	Arg
	180						185					190			
Asn	Lys	Gln	Pro	Trp	His	Pro	Asp	Glu	Asp	Asp	Glu	Glu	Phe	Thr	Ala
	195					200					205				
Asn	Glu	Glu	Glu	Ala	Glu	Asp	Glu	Glu	Asp	Thr	Ile	Ala	Ala	Glu	Glu
	210				215					220					
Gln	Leu	Glu	Gly	Glu	Val	Asp	His	Ala	Met	Glu	Leu	Ser	Glu	Leu	Ala
225				230					235					240	
Arg	Glu	Gly	Glu	Leu	Ser	Met	Glu	Glu	Leu	Gln	Gln	Tyr	Ala	Gly	
			245				250					255			
Ala	Tyr	Ala	Pro	Gly	Ser	Gly	Ser	Ser	Glu	Asp	Glu	Asp	Glu	Asp	Glu
	260					265					270				
Val	Asp	Ala	Asn	Ser	Ser	Asp	Cys	Glu	Pro	Glu	Gly	Pro	Val	Glu	Ala
	275					280					285				
Glu	Glu	Pro	Pro	Gln	Glu	Asp	Ser	Ser	Ser	Gln	Ser	Asp	Ser	Val	Glu

290		295		300
Asp Arg Ser Glu Asp Glu Glu Asp Glu His Ser Glu Glu Glu Glu Thr				
305		310		315
Ser Gly Ser Ser Ala Ser Glu Glu Ser Glu Ser Glu Glu Ser Glu Asp				320
	325		330	335
Ala Gln Ser Gln Ser Gln Ala Asp Glu Glu Glu Glu Asp Asp Asp Phe				
	340		345	350
Gly Val Glu Tyr Leu Leu Ala Arg Asp Glu Glu Gln Ser Glu Ala Asp				
	355		360	365
Ala Gly Ser Gly Pro Pro Thr Pro Gly Pro Thr Thr Leu Gly Pro Lys				
	370		375	380
Lys Glu Ile Thr Asp Ile Ala Ala Ala Glu Ser Leu Gln Pro Lys				
385		390		395
Gly Tyr Thr Leu Ala Thr Thr Gln Val Lys Thr Pro Ile Pro Leu Leu				400
	405		410	415
Leu Arg Gly Gln Leu Arg Glu Tyr Gln His Ile Gly Leu Asp Trp Leu				
	420		425	430
Val Thr Met Tyr Glu Lys Lys Leu Asn Gly Ile Leu Ala Asp Glu Met				
	435		440	445
Gly Leu Gly Lys Thr Ile Gln Thr Ile Ser Leu Leu Ala His Leu Ala				
	450		455	460
Cys Glu Lys Gly Asn Trp Gly Pro His Leu Ile Ile Val Pro Thr Ser				
465		470		475
Val Met Leu Asn Trp Glu Met Glu Leu Lys Arg Trp Cys Pro Ser Phe				
	485		490	495
Lys Ile Leu Thr Tyr Tyr Gly Ala Gln Lys Glu Arg Lys Leu Lys Arg				
	500		505	510
Gln Gly Trp Thr Lys Pro Asn Ala Phe His Val Cys Ile Thr Ser Tyr				
	515		520	525
Lys Leu Val Leu Gln Asp His Gln Ala Phe Arg Arg Lys Asn Trp Arg				
	530		535	540
Tyr Leu Ile Leu Asp Glu Ala Gln Asn Ile Lys Asn Phe Lys Ser Gln				
545		550		555
Arg Trp Gln Ser Leu Leu Asn Phe Asn Ser Gln Arg Arg Leu Leu Leu				
	565		570	575
Thr Gly Thr Pro Leu Gln Asn Ser Leu Met Glu Leu Trp Ser Leu Met				
	580		585	590
His Phe Leu Met Pro His Val Phe Gln Ser His Arg Glu Phe Lys Glu				
	595		600	605
Trp Phe Ser Asn Pro Leu Thr Gly Met Ile Glu Gly Ser Gln Glu Tyr				
	610		615	620
Asn Glu Gly Leu Val Lys Arg Leu His Lys Val Leu Arg Pro Phe Leu				
625		630		635
Leu Arg Arg Val Lys Val Asp Val Glu Lys Gln Met Pro Lys Lys Tyr				
	645		650	655
Glu His Val Ile Arg Cys Arg Leu Ser Lys Arg Gln Arg Cys Leu Tyr				
	660		665	670
Asp Asp Phe Met Ala Gln Thr Thr Lys Glu Thr Leu Ala Thr Gly				
	675		680	685
His Phe Met Ser Val Ile Asn Ile Leu Met Gln Leu Arg Lys Val Cys				
	690		695	700
Asn His Pro Asn Leu Phe Asp Pro Arg Pro Val Thr Ser Pro Phe Ile				
705		710		715
Thr Pro Gly Ile Cys Phe Ser Thr Ala Ser Leu Val Leu Arg Ala Thr				720

					725					730					735
Asp	Val	His	Pro	Leu	Gln	Arg	Ile	Asp	Met	Gly	Arg	Phe	Asp	Leu	Ile
			740						745				750		
Gly	Leu	Glu	Gly	Arg	Val	Ser	Arg	Tyr	Glu	Ala	Asp	Thr	Phe	Leu	Pro
		755					760					765			
Arg	His	Arg	Leu	Ser	Arg	Arg	Val	Leu	Leu	Glu	Val	Ala	Thr	Ala	Pro
	770					775					780				
Asp	Pro	Pro	Pro	Arg	Pro	Lys	Pro	Val	Lys	Met	Lys	Val	Asn	Arg	Met
785					790					795				800	
Leu	Gln	Pro	Val	Pro	Lys	Gln	Glu	Gly	Arg	Thr	Val	Val	Val	Val	Asn
			805						810					815	
Asn	Pro	Arg	Ala	Pro	Leu	Gly	Pro	Val	Pro	Val	Arg	Pro	Pro	Pro	Gly
			820					825					830		
Pro	Glu	Leu	Ser	Ala	Gln	Pro	Thr	Pro	Gly	Pro	Val	Pro	Gln	Val	Leu
	835						840					845			
Pro	Ala	Ser	Leu	Met	Val	Ser	Ala	Ser	Pro	Ala	Gly	Pro	Pro	Leu	Ile
	850					855					860				
Pro	Ala	Ser	Arg	Pro	Pro	Gly	Pro	Val	Leu	Leu	Pro	Pro	Leu	Gln	Pro
865					870					875					880
Asn	Ser	Gly	Ser	Leu	Pro	Gln	Val	Leu	Pro	Ser	Pro	Leu	Gly	Val	Leu
			885						890					895	
Ser	Gly	Thr	Ser	Arg	Pro	Pro	Thr	Pro	Thr	Leu	Ser	Leu	Lys	Pro	Thr
		900						905					910		
Pro	Pro	Ala	Pro	Val	Arg	Leu	Ser	Pro	Ala	Pro	Pro	Pro	Gly	Pro	Ser
	915						920						925		
Ser	Leu	Leu	Lys	Pro	Leu	Thr	Val	Pro	Pro	Gly	Tyr	Thr	Phe	Pro	Pro
	930					935					940				
Ala	Ala	Ala	Thr	Thr	Thr	Ser	Thr	Thr	Thr	Ala	Thr	Ala	Thr	Thr	Thr
945					950					955					960
Ala	Val	Pro	Ala	Pro	Thr	Pro	Ala	Pro	Gln	Arg	Leu	Ile	Leu	Ser	Pro
			965						970					975	
Asp	Met	Gln	Ala	Arg	Leu	Pro	Ser	Gly	Glu	Val	Val	Ser	Ile	Gly	Gln
	980							985					990		
Leu	Ala	Ser	Leu	Ala	Gln	Arg	Pro	Val	Ala	Asn	Ala	Gly	Gly	Ser	Lys
	995						1000					1005			
Pro	Leu	Thr	Phe	Gln	Ile	Gln	Gly	Asn	Lys	Leu	Thr	Leu	Thr	Gly	Ala
	1010					1015						1020			
Gln	Val	Arg	Gln	Leu	Ala	Val	Gly	Gln	Pro	Arg	Pro	Leu	Gln	Met	Pro
1025					1030					1035					1040
Pro	Thr	Met	Val	Asn	Asn	Thr	Gly	Val	Val	Lys	Ile	Val	Val	Arg	Gln
			1045						1050					1055	
Ala	Pro	Arg	Asp	Gly	Leu	Thr	Pro	Val	Pro	Pro	Leu	Ala	Pro	Ala	Pro
		1060						1065					1070		
Arg	Pro	Pro	Ser	Ser	Gly	Leu	Pro	Ala	Val	Leu	Asn	Pro	Arg	Pro	Thr
	1075						1080					1085			
Leu	Thr	Pro	Gly	Arg	Leu	Pro	Thr	Pro	Thr	Leu	Gly	Thr	Ala	Arg	Ala
	1090					1095						1100			
Pro	Met	Pro	Thr	Pro	Thr	Leu	Val	Arg	Pro	Leu	Leu	Lys	Leu	Val	His
1105					1110					1115					1120
Ser	Pro	Ser	Pro	Glu	Val	Ser	Ala	Ser	Ala	Pro	Gly	Ala	Ala	Pro	Leu
			1125						1130					1135	
Thr	Ile	Ser	Ser	Pro	Leu	His	Val	Pro	Ser	Ser	Leu	Pro	Gly	Pro	Ala
		1140						1145				1150			
Ser	Ser	Pro	Met	Pro	Ile	Pro	Asn	Ser	Ser	Pro	Leu	Ala	Ser	Pro	Val



```

1155      1160      1165
Ser Ser Thr Val Ser Val Pro Leu Ser Ser Ser Leu Pro Ile Ser Val
1170      1175      1180
Pro Thr Thr Leu Pro Ala Pro Ala Ser Ala Pro Leu Thr Ile Pro Ile
1185      1190      1195      1200
Ser Ala Pro Leu Thr Val Ser Ala Ser Gly Pro Ala Leu Leu Thr Ser
1205      1210      1215
Val Thr Pro Pro Leu Ala Pro Val Val Pro Ala Ala Pro Gly Pro Pro
1220      1225      1230
Ser Leu Ala Pro Ser Gly Ala Ser Pro Ser Ala Ser Ala Leu Thr Leu
1235      1240      1245
Gly Leu Ala Thr Ala Pro Ser Leu Ser Ser Ser Gln Thr Pro Gly His
1250      1255      1260
Pro Leu Leu Leu Ala Pro Thr Ser Ser His Val Pro Gly Leu Asn Ser
1265      1270      1275      1280
Thr Val Ala Pro Ala Cys Ser Pro Val Leu Val Pro Ala Ser Ala Leu
1285      1290      1295
Ala Ser Pro Phe Pro Ser Ala Pro Asn Pro Ala Pro Ala Gln Ala Ser
1300      1305      1310
Leu Leu Ala Pro Ala Ser Ser Ala Ser Gln Ala Leu Ala Thr Pro Leu
1315      1320      1325
Ala Pro Met Ala Ala Pro Gln Thr Ala Ile Leu Ala Pro Ser Pro Ala
1330      1335      1340
Pro Pro Leu Ala Pro Leu Pro Val Leu Ala Pro Ser Pro Gly Ala Ala
1345      1350      1355      1360
Pro Val Leu Ala Ser Ser Gln Thr Pro Val Pro Val Met Ala Pro Ser
1365      1370      1375
Ser Thr Pro Gly Thr Ser Leu Ala Ser Ala Ser Pro Val Pro Ala Pro
1380      1385      1390
Thr Pro Val Leu Ala Pro Ser Ser Thr Gln Thr Met Leu Pro Ala Pro
1395      1400      1405
Val Pro Ser Pro Leu Pro Ser Pro Ala Ser Thr Gln Thr Leu Ala Leu
1410      1415      1420
Ala Pro Ala Leu Ala Pro Thr Leu Gly Gly Ser Ser Pro Ser Gln Thr
1425      1430      1435      1440
Leu Ser Leu Gly Thr Gly Asn Pro Gln Gly Pro Phe Pro Thr Gln Thr
1445      1450      1455
Leu Ser Leu Thr Pro Ala Ser Ser Leu Val Pro Thr Pro Ala Gln Thr
1460      1465      1470
Leu Ser Leu Ala Pro Gly Pro Pro Leu Gly Pro Thr Gln Thr Leu Ser
1475      1480      1485
Leu Ala Pro Ala Pro Pro Leu Ala Pro Ala Ser Pro Val Gly Pro Ala
1490      1495      1500
Pro Ala His Thr Leu Thr Leu Ala Pro Ala Ser Ser Ser Ala Ser Leu
1505      1510      1515      1520
Leu Ala Pro Ala Ser Val Gln Thr Leu Thr Leu Ser Pro Ala Pro Val
1525      1530      1535
Pro Thr Leu Gly Pro Ala Ala Ala Gln Thr Leu Ala Leu Ala Pro Ala
1540      1545      1550
Ser Thr Gln Ser Pro Ala Ser Gln Ala Ser Ser Leu Val Val Ser Ala
1555      1560      1565
Ser Gly Ala Ala Pro Leu Pro Val Thr Met Val Ser Arg Leu Pro Val
1570      1575      1580
Ser Lys Asp Glu Pro Asp Thr Leu Thr Leu Arg Ser Gly Pro Pro Ser

```

1585                      1590                      1595                      1600  
 Pro Pro Ser Thr Ala Thr Ser Phe Gly Gly Pro Arg Pro Arg Arg Gln  
                                  1605                      1610                      1615  
 Pro Pro Pro Pro Pro Arg Ser Pro Phe Tyr Leu Asp Ser Leu Glu Glu  
                                  1620                      1625                      1630  
 Lys Arg Lys Arg Gln Arg Ser Glu Arg Leu Glu Arg Ile Phe Gln Leu  
                                  1635                      1640                      1645  
 Ser Glu Ala His Gly Ala Leu Ala Pro Val Tyr Gly Thr Glu Val Leu  
                                  1650                      1655                      1660  
 Asp Phe Cys Thr Leu Pro Gln Pro Val Ala Ser Pro Ile Gly Pro Arg  
 1665                      1670                      1675                      1680  
 Ser Pro Gly Pro Ser His Pro Thr Phe Trp Thr Tyr Thr Glu Ala Ala  
                                  1685                      1690                      1695  
 His Arg Ala Val Leu Phe Pro Gln Gln Arg Leu Asp Gln Leu Ser Glu  
                                  1700                      1705                      1710  
 Ile Ile Glu Arg Phe Ile Phe Val Met Pro Pro Val Glu Ala Pro Pro  
                                  1715                      1720                      1725  
 Pro Ser Leu His Ala Cys His Pro Pro Pro Trp Leu Ala Pro Arg Gln  
                                  1730                      1735                      1740  
 Ala Ala Phe Gln Glu Gln Leu Ala Ser Glu Leu Trp Pro Arg Ala Arg  
 1745                      1750                      1755                      1760  
 Pro Leu His Arg Ile Val Cys Asn Met Arg Thr Gln Phe Pro Asp Leu  
                                  1765                      1770                      1775  
 Arg Leu Ile Gln Tyr Asp Cys Gly Lys Leu Gln Thr Leu Ala Val Leu  
                                  1780                      1785                      1790  
 Leu Arg Gln Leu Lys Ala Glu Gly His Arg Val Leu Ile Phe Thr Gln  
                                  1795                      1800                      1805  
 Met Thr Arg Met Leu Asp Val Leu Glu Gln Phe Leu Thr Tyr His Gly  
                                  1810                      1815                      1820  
 His Leu Tyr Leu Arg Leu Asp Gly Ser Thr Arg Val Glu Gln Arg Gln  
 1825                      1830                      1835                      1840  
 Ala Leu Met Glu Arg Phe Asn Ala Asp Lys Arg Ile Phe Cys Phe Ile  
                                  1845                      1850                      1855  
 Leu Ser Thr Arg Ser Gly Gly Val Gly Val Asn Leu Thr Gly Ala Asp  
                                  1860                      1865                      1870  
 Thr Val Val Phe Tyr Asp Ser Asp Trp Asn Pro Thr Met Asp Ala Gln  
                                  1875                      1880                      1885  
 Ala Gln Asp Arg Cys His Arg Ile Gly Gln Thr Arg Asp Val His Ile  
                                  1890                      1895                      1900  
 Tyr Arg Leu Ile Ser Glu Arg Thr Val Glu Glu Asn Ile Leu Lys Lys  
 1905                      1910                      1915                      1920  
 Ala Asn Gln Lys Arg Met Leu Gly Asp Met Ala Ile Glu Gly Gly Asn  
                                  1925                      1930                      1935  
 Phe Thr Thr Ala Tyr Phe Lys Gln Gln Thr Ile Arg Glu Leu Phe Asp  
                                  1940                      1945                      1950  
 Met Pro Leu Glu Glu Pro Ser Ser Ser Ser Val Pro Ser Ala Pro Glu  
                                  1955                      1960                      1965  
 Glu Glu Glu Glu Thr Val Ala Ser Lys Gln Thr His Ile Leu Glu Gln  
                                  1970                      1975                      1980  
 Ala Leu Cys Arg Ala Glu Asp Glu Glu Asp Ile Arg Ala Ala Thr Gln  
 1985                      1990                      1995                      2000  
 Ala Lys Ala Glu Gln Val Ala Glu Leu Ala Glu Phe Asn Glu Asn Asp  
                                  2005                      2010                      2015  
 Gly Phe Pro Ala Gly Glu Gly Glu Glu Ala Gly Arg Pro Gly Ala Glu

2020	2025	2030
Asp Glu Glu Met Ser Arg Ala Glu Gln Glu Ile Ala Ala Leu Val Glu		
2035	2040	2045
Gln Leu Thr Pro Ile Glu Arg Tyr Ala Met Lys Phe Leu Glu Ala Ser		
2050	2055	2060
Leu Glu Glu Val Ser Arg Glu Glu Leu Lys Gln Ala Glu Glu Gln Val		
2065	2070	2075
Glu Ala Ala Arg Lys Asp Leu Asp Gln Ala Lys Glu Glu Val Phe Arg		
2085	2090	2095
Leu Pro Gln Glu Glu Glu Gly Pro Gly Ala Gly Asp Glu Ser Ser		
2100	2105	2110
Cys Gly Thr Gly Gly Gly Thr His Arg Arg Ser Lys Lys Ala Lys Ala		
2115	2120	2125
Pro Glu Arg Pro Gly Thr Arg Val Ser Glu Arg Leu Arg Gly Ala Arg		
2130	2135	2140
Ala Glu Thr Gln Gly Ala Asn His Thr Pro Val Ile Ser Ala His Gln		
2145	2150	2155
Thr Arg Ser Thr Thr Thr Pro Pro Arg Cys Ser Pro Ala Arg Glu Arg		
2165	2170	2175
Val Pro Arg Pro Ala Pro Arg Pro Arg Pro Thr Pro Ala Ser Ala Pro		
2180	2185	2190
Ala Ala Ile Pro Ala Leu Val Pro Val Pro Val Ser Ala Pro Val Pro		
2195	2200	2205
Ile Ser Ala Pro Asn Pro Ile Thr Ile Leu Pro Val His Ile Leu Pro		
2210	2215	2220
Ser Pro Pro Pro Pro Ser Gln Ile Pro Pro Cys Ser Ser Pro Ala Cys		
2225	2230	2235
Thr Pro Pro Pro Ala Cys Thr Pro Pro Pro Ala His Thr Pro Pro Pro		
2245	2250	2255
Ala Gln Thr Cys Leu Val Thr Pro Ser Ser Pro Leu Leu Leu Gly Pro		
2260	2265	2270
Pro Ser Val Pro Ile Ser Ala Ser Val Thr Asn Leu Pro Leu Gly Leu		
2275	2280	2285
Arg Pro Glu Ala Glu Leu Cys Ala Gln Ala Leu Ala Ser Pro Glu Ser		
2290	2295	2300
Leu Glu Leu Ala Ser Val Ala Ser Ser Glu Thr Ser Ser Leu Ser Leu		
2305	2310	2315
Val Pro Pro Lys Asp Leu Leu Pro Val Ala Val Glu Ile Leu Pro Val		
2325	2330	2335
Ser Glu Lys Asn Leu Ser Leu Thr Pro Ser Ala Pro Ser Leu Thr Leu		
2340	2345	2350
Glu Ala Gly Ser Ile Pro Asn Gly Gln Glu Gln Glu Ala Pro Asp Ser		
2355	2360	2365
Ala Glu Gly Thr Thr Leu Thr Val Leu Pro Glu Gly Glu Glu Leu Pro		
2370	2375	2380
Leu Cys Val Ser Glu Ser Asn Gly Leu Glu Leu Pro Pro Ser Ala Ala		
2385	2390	2395
Ser Asp Glu Pro Leu Gln Glu Pro Leu Glu Ala Asp Arg Thr Ser Glu		
2405	2410	2415
Glu Leu Thr Glu Ala Lys Thr Pro Thr Ser Ser Pro Glu Lys Pro Gln		
2420	2425	2430
Glu Leu Val Thr Ala Glu Val Ala Ala Pro Ser Thr Ser Ser Ser Ala		
2435	2440	2445
Thr Ser Ser Pro Glu Gly Pro Ser Pro Ala Arg Pro Pro Arg Arg Arg		

2450 2455 2460  
 Thr Ser Ala Asp Val Glu Ile Arg Gly Gln Gly Thr Gly Arg Pro Gly  
 2465 2470 2475 2480  
 Gln Pro Pro Gly Pro Lys Val Leu Arg Lys Leu Pro Gly Arg Leu Val  
 2485 2490 2495  
 Thr Val Val Glu Lys Glu Leu Val Arg Arg Arg Arg Gln Gln Arg  
 2500 2505 2510  
 Gly Ala Ala Ser Thr Leu Val Pro Gly Val Ser Glu Thr Ser Ala Ser  
 2515 2520 2525  
 Pro Gly Ser Pro Ser Val Arg Ser Met Ser Gly Pro Glu Ser Ser Pro  
 2530 2535 2540  
 Pro Ile Gly Gly Pro Cys Glu Ala Ala Pro Ser Ser Ser Leu Pro Thr  
 2545 2550 2555 2560  
 Pro Pro Gln Gln Pro Phe Ile Ala Arg Arg His Ile Glu Leu Gly Val  
 2565 2570 2575  
 Thr Gly Gly Gly Ser Pro Glu Asn Gly Asp Gly Ala Leu Leu Ala Ile  
 2580 2585 2590  
 Thr Pro Pro Ala Val Lys Arg Arg Arg Gly Arg Pro Pro Lys Lys Asn  
 2595 2600 2605  
 Arg Ser Pro Ala Asp Ala Gly Arg Gly Val Asp Glu Ala Pro Ser Ser  
 2610 2615 2620  
 Thr Leu Lys Gly Lys Thr Asn Gly Ala Asp Pro Val Pro Gly Pro Glu  
 2625 2630 2635 2640  
 Thr Leu Ile Val Ala Asp Pro Val Leu Glu Pro Gln Leu Ile Pro Gly  
 2645 2650 2655  
 Pro Gln Pro Leu Gly Pro Gln Pro Val His Arg Pro Asn Pro Leu Leu  
 2660 2665 2670  
 Ser Pro Val Glu Lys Arg Arg Arg Gly Arg Pro Pro Lys Ala Arg Asp  
 2675 2680 2685  
 Leu Pro Ile Pro Gly Thr Ile Ser Ser Ala Gly Asp Gly Asn Ser Glu  
 2690 2695 2700  
 Ser Arg Thr Gln Pro Pro His Pro Ser Pro Leu Thr Pro Leu Pro  
 2705 2710 2715 2720  
 Pro Leu Leu Val Cys Pro Thr Ala Thr Val Ala Asn Thr Val Thr Thr  
 2725 2730 2735  
 Val Thr Ile Ser Thr Ser Pro Pro Lys Arg Lys Arg Gly Arg Pro Pro  
 2740 2745 2750  
 Lys Asn Pro Pro Ser Pro Arg Pro Ser Gln Leu Pro Val Leu Asp Arg  
 2755 2760 2765  
 Asp Ser Thr Ser Val Leu Glu Ser Cys Gly Leu Gly Arg Arg Arg Gln  
 2770 2775 2780  
 Pro Gln Gly Gln Gly Glu Ser Glu Gly Ser Ser Ser Asp Glu Asp Gly  
 2785 2790 2795 2800  
 Ser Arg Pro Leu Thr Arg Leu Ala Arg Leu Arg Leu Glu Ala Glu Gly  
 2805 2810 2815  
 Met Arg Gly Arg Lys Ser Gly Gly Ser Met Val Val Ala Val Ile Gln  
 2820 2825 2830  
 Asp Asp Leu Asp Leu Ala Asp Ser Gly Pro Gly Gly Leu Glu Leu Thr  
 2835 2840 2845  
 Pro Pro Val Val Ser Leu Thr Pro Lys Leu Arg Ser Thr Arg Leu Arg  
 2850 2855 2860  
 Pro Gly Ser Leu Val Pro Pro Leu Glu Thr Glu Lys Leu Pro Arg Lys  
 2865 2870 2875 2880  
 Arg Ala Gly Ala Pro Val Gly Gly Ser Pro Gly Leu Ala Lys Arg Gly

	2885		2890		2895
Arg	Leu	Gln	Pro	Pro	Ser
	2900		2905		2910
Ser	Glu	Ala	Glu	Ala	Ser
	2915		2920		2925
Arg	Arg	Arg	Pro	Gly	Pro
	2930		2935		2940
Asp	Gln	Arg	Ile	Leu	Arg
	2945		2950		2955
Ala	Val	Ser	His	Arg	Gly
	2965		2970		

<210> 1991  
 <211> 3102  
 <212> DNA  
 <213> Homo sapiens

<400> 1991  
 nntcctttgc aggcctttttt cccctctccc cctcccccg acctcctttg cgtacaagaa  
 60  
 gtgaagagtt tgggggaaaaa gggacacatg ctctgcttct gcagagaaat gcttctcagg  
 120  
 ggggttgact gttctgtaaa cccccactcc ccgccagcgc aggtgttttg aactccagct  
 180  
 gagggcctgc tggtgctggtg gaaactccta ggcagcagag gccacgact acttcctcct  
 240  
 gagtgccgtt cagtggcctg tgtccaggct ctgaagggtt ccaagaagct ggtgctgtct  
 300  
 gtgtactcag caggggcgcac cctgggggc tacgtcacca accacatcta cacctgggtg  
 360  
 gaccgcagc gccgcagcat ctccccaccc tcgggcctgc ccagcccca cgggtggtgcc  
 420  
 ctgaggcagc aggagggtga ccggaggagc accctgcacc tcctgcaagg aggggatgag  
 480  
 aaaaaggtga acctggtgct gggggacggc cggtccttgg gctcacgat cgtggggga  
 540  
 gctgagtacg gccttggcat ttacatcact ggcgtggacc caggctctga agcagaaggc  
 600  
 agcgggctca aggttgggga ccagattcta gaagtgaatg ggcggagctt tctcaacatc  
 660  
 ctacacgacg aggtgtcag gctgcttaag tcctctcggc acctcatcct gacagtgaag  
 720  
 gacgtcggga ggctgcccc tgccgcacc actgtggacg agaccaagtg gatcgccagt  
 780  
 tcccggatca gggagaccat ggcgaactcg gcagggtttc ttggcgatct cacaacagaa  
 840  
 ggaataaaca agccaggatt ttacaagggc ccagccggt cccaggtgac cctgagcagc  
 900  
 ctggggaacc agacacgagt gctgctggag gagcaggctc ggcacctgct gaacgagcag  
 960  
 gaacacacca ccattggccta ctacctggat gagtaccgtg gcggcagcgt ctctgtggag  
 1020  
 gccctcgtca tggccctgtt caagctgctc aacacccacg ccaagttctc actcctctct  
 1080

gaggtgagag gcaccatttc cccgcaagac ctagaacgct tcgaccacct ggtgctgagg  
1140  
cgtgagattg agtccatgaa ggcgcggcag cccccaggcc cgggggctgg ggacacctac  
1200  
tccatggtct cctacagtga cacgggttca tccacaggca gccacggcac ctccaccacc  
1260  
gtcagctcgg ccaggaacac tctggacctg gaggaactg gcgaggctgt ccagggaat  
1320  
atcaacgccc tcccagatgt gtccgtggat gatgtcagat ccacctccca ggggctgtca  
1380  
agcttcaagc cactgcctcg cccaccacct ctggcccaag gcaacgacct cccactaggg  
1440  
cagccaagga agctggggag agaggacctc cagccacctt cctccatgcc ttctgtctcg  
1500  
ggcactgtct tctcggtccc acagaaccgc agcccgccag cgggcaccgc acccacccca  
1560  
gggacctcct ctgcacagga cttgccctct tccccatct atgcctccgt ctcccctgcc  
1620  
aaccacagct ccaagaggcc gctggacgcc catctggccc tggtaacca acacccatc  
1680  
ggccccctcc cacgggtcca gtcaccccg cacctgaaaa gccctctgc agaggccaca  
1740  
gtggtgggg gctgccttct gccccatca ccctctggcc acccagacca gacaggcaca  
1800  
aaccagcact ttgtcatggt ggagggtcac cgccccgaca gcgagccaga cgtcaatgaa  
1860  
gtgagggcgc tgccccagac gcgcacagcc tctacgtctt cccagctctc ggacagcggg  
1920  
cagactctaa gcgaggacag tggTgtggat gctggcgagg cagaggccag cgccccaggc  
1980  
cgaggaaggc agtcggtgtc caccaagagc aggagttaga aggagctgcc tcggaacgag  
2040  
aggcccacag atggggccaa caaacgcct ggacttctgg agcccacgtc cactctggtc  
2100  
cgtgtgaaga aaagtgcggc caccctgggc atcgccatcg aggggtggcg caacaccgc  
2160  
cagccccctc ctaggattgt cactattcag agaggcggt cagctcaca ctgtgggcag  
2220  
ctcaagggtg gccacgtgat tctggaagtg aatgggctga cgcttcgggg caaggagcac  
2280  
cgggaggccg ccgcattat cgccgaggcc ttcaagacta aggaccgtga ctacattgac  
2340  
tttctggtca ctgagttcaa tgtgatgtc tagaggccaa ggcctgagg cctcccacca  
2400  
ctgcccagcc cctgggtccc gtccctttcc accgttggt tcatcaagct ccttgcgggg  
2460  
ttggggctgc atggccaggg tggcaggaag acatccccc tccatcccag cccactggac  
2520  
cagaactggg agaggaagag agcaggacaa ggcagacaga aggtcaggtc aggaactggt  
2580  
gctgtactgg gtacacagta ggcgcccagg acaagtgggt tgcaagacag gaagaaagga  
2640  
aaaggaaggg cagagtgtc gtttctccag gttgggttg gggcactgct gtccccctc  
2700

cagctaggac ccagcccatc cccagatgcc tgagcctttg tccaaagtga ggtcactcga  
 2760  
 gaattcatgg acacggcccc cagtcagggg gcaccttgca agacctttag tgccacaaat  
 2820  
 aagcatcgag cacctcccca ttcacacccc cattcctcct ggctccttat ccccatggg  
 2880  
 gtttattatt tatttccttc cccatgcccc tggggacccc aaggccccag cttccctctg  
 2940  
 cccccccagc ctatcccaga ggccttgacg gtgaccagca gtgtcattgt atttatatac  
 3000  
 agagcttatg actttaattt ttcaataaag aaatctgaac aagggttaaaa aaaaaaaaaa  
 3060  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa  
 3102

<210> 1992

<211> 733

<212> PRT

<213> Homo sapiens

<400> 1992

Thr	Pro	Ala	Glu	Gly	Leu	Leu	Ala	Ala	Gly	Lys	Leu	Leu	Gly	Ser	Arg
1				5					10					15	
Gly	Pro	Arg	Leu	Leu	Pro	Pro	Glu	Cys	Arg	Ser	Val	Ala	Cys	Val	Gln
			20					25					30		
Ala	Leu	Lys	Gly	Ser	Lys	Lys	Leu	Val	Leu	Ser	Val	Tyr	Ser	Ala	Gly
		35					40						45		
Arg	Ile	Pro	Gly	Gly	Tyr	Val	Thr	Asn	His	Ile	Tyr	Thr	Trp	Val	Asp
	50					55					60				
Pro	Gln	Gly	Arg	Ser	Ile	Ser	Pro	Pro	Ser	Gly	Leu	Pro	Gln	Pro	His
65					70					75				80	
Gly	Gly	Ala	Leu	Arg	Gln	Gln	Glu	Gly	Asp	Arg	Arg	Ser	Thr	Leu	His
			85						90					95	
Leu	Leu	Gln	Gly	Gly	Asp	Glu	Lys	Lys	Val	Asn	Leu	Val	Leu	Gly	Asp
		100						105						110	
Gly	Arg	Ser	Leu	Gly	Leu	Thr	Ile	Arg	Gly	Gly	Ala	Glu	Tyr	Gly	Leu
	115						120					125			
Gly	Ile	Tyr	Ile	Thr	Gly	Val	Asp	Pro	Gly	Ser	Glu	Ala	Glu	Gly	Ser
	130					135					140				
Gly	Leu	Lys	Val	Gly	Asp	Gln	Ile	Leu	Glu	Val	Asn	Gly	Arg	Ser	Phe
145					150					155					160
Leu	Asn	Ile	Leu	His	Asp	Glu	Ala	Val	Arg	Leu	Leu	Lys	Ser	Ser	Arg
			165						170					175	
His	Leu	Ile	Leu	Thr	Val	Lys	Asp	Val	Gly	Arg	Leu	Pro	His	Ala	Arg
		180						185						190	
Thr	Thr	Val	Asp	Glu	Thr	Lys	Trp	Ile	Ala	Ser	Ser	Arg	Ile	Arg	Glu
	195						200						205		
Thr	Met	Ala	Asn	Ser	Ala	Gly	Phe	Leu	Gly	Asp	Leu	Thr	Thr	Glu	Gly
	210					215					220				
Ile	Asn	Lys	Pro	Gly	Phe	Tyr	Lys	Gly	Pro	Ala	Gly	Ser	Gln	Val	Thr
225					230					235					240
Leu	Ser	Ser	Leu	Gly	Asn	Gln	Thr	Arg	Val	Leu	Leu	Glu	Glu	Gln	Ala
				245					250					255	
Arg	His	Leu	Leu	Asn	Glu	Gln	Glu	His	Thr	Thr	Met	Ala	Tyr	Tyr	Leu

	260		265		270
Asp	Glu Tyr Arg Gly Gly Ser Val	Ser Val Glu Ala Leu Val Met Ala			
	275		280		285
Leu	Phe Lys Leu Leu Asn Thr His Ala Lys Phe Ser Leu Leu Ser Glu				
	290		295		300
Val	Arg Gly Thr Ile Ser Pro Gln Asp Leu Glu Arg Phe Asp His Leu				
305		310		315	320
Val	Leu Arg Arg Arg Glu Ile Glu Ser Met Lys Ala Arg Gln Pro Pro Gly				
	325		330		335
Pro	Gly Ala Gly Asp Thr Tyr Ser Met Val Ser Tyr Ser Asp Thr Gly				
	340		345		350
Ser	Ser Thr Gly Ser His Gly Thr Ser Thr Thr Val Ser Ser Ala Arg				
	355		360		365
Asn	Thr Leu Asp Leu Glu Glu Thr Gly Glu Ala Val Gln Gly Asn Ile				
370		375		380	
Asn	Ala Leu Pro Asp Val Ser Val Asp Asp Val Arg Ser Thr Ser Gln				
385		390		395	400
Gly	Leu Ser Ser Phe Lys Pro Leu Pro Arg Pro Pro Pro Leu Ala Gln				
	405		410		415
Gly	Asn Asp Leu Pro Leu Gly Gln Pro Arg Lys Leu Gly Arg Glu Asp				
	420		425		430
Leu	Gln Pro Pro Ser Ser Met Pro Ser Cys Ser Gly Thr Val Phe Ser				
	435		440		445
Ala	Pro Gln Asn Arg Ser Pro Pro Ala Gly Thr Ala Pro Thr Pro Gly				
	450		455		460
Thr	Ser Ser Ala Gln Asp Leu Pro Ser Ser Pro Ile Tyr Ala Ser Val				
465		470		475	480
Ser	Pro Ala Asn Pro Ser Ser Lys Arg Pro Leu Asp Ala His Leu Ala				
	485		490		495
Leu	Val Asn Gln His Pro Ile Gly Pro Phe Pro Arg Val Gln Ser Pro				
	500		505		510
Pro	His Leu Lys Ser Pro Ser Ala Glu Ala Thr Val Ala Gly Gly Cys				
	515		520		525
Leu	Leu Pro Pro Ser Pro Ser Gly His Pro Asp Gln Thr Gly Thr Asn				
	530		535		540
Gln	His Phe Val Met Val Glu Val His Arg Pro Asp Ser Glu Pro Asp				
545		550		555	560
Val	Asn Glu Val Arg Ala Leu Pro Gln Thr Arg Thr Ala Ser Thr Leu				
	565		570		575
Ser	Gln Leu Ser Asp Ser Gly Gln Thr Leu Ser Glu Asp Ser Gly Val				
	580		585		590
Asp	Ala Gly Glu Ala Glu Ala Ser Ala Pro Gly Arg Gly Arg Gln Ser				
	595		600		605
Val	Ser Thr Lys Ser Arg Ser Ser Lys Glu Leu Pro Arg Asn Glu Arg				
	610		615		620
Pro	Thr Asp Gly Ala Asn Lys Pro Pro Gly Leu Leu Glu Pro Thr Ser				
625		630		635	640
Thr	Leu Val Arg Val Lys Lys Ser Ala Ala Thr Leu Gly Ile Ala Ile				
	645		650		655
Glu	Gly Gly Ala Asn Thr Arg Gln Pro Leu Pro Arg Ile Val Thr Ile				
	660		665		670
Gln	Arg Gly Gly Ser Ala His Asn Cys Gly Gln Leu Lys Val Gly His				
	675		680		685
Val	Ile Leu Glu Val Asn Gly Leu Thr Leu Arg Gly Lys Glu His Arg				



690	695	700
Glu Ala Ala Arg Ile Ile Ala Glu Ala Phe Lys Thr Lys Asp Arg Asp		
705	710	715
Tyr Ile Asp Phe Leu Val Thr Glu Phe Asn Val Met Leu		720
	725	730

<210> 1993  
 <211> 957  
 <212> DNA  
 <213> Homo sapiens

<400> 1993  
 nngaaaacct acgggatgac acgtgccctc gatcacatcg acatcgccat cccagctggc  
 60  
 cagtcggtcg ccgtcatggg gccgtccggg tcaggcaaga ccacctgct gcaactgttg  
 120  
 tcggggatcc tctcgctga ctccggcagt atcgaactgg ctctgccga ccgcaccgtc  
 180  
 aacgtcgaac acctctctaa cgaaggccga gcaaagctac gccgtcaatc ccttggtttc  
 240  
 gtcttccaac aaggaatgct cgtacccgag ctcaactgtg tcgagaacac cgccctaccc  
 300  
 ctcatgctta acggcgatc ccaaaccgat gcggtcaggc atgccacca atggcttgaa  
 360  
 tcgatggggg taggcggcat ggaggatcgt cggattgggc agctctccgg gggccaagct  
 420  
 caacgcgtca ctattgcccg gtcccaggta atcgatccgt cgattgtctt cgctgacgaa  
 480  
 ccacccgag ccctcgactc agccaccgcc gtcgaagtca tggccattct gctttcggcg  
 540  
 acgaccgggc ggggacgcac cctcgtcgtc gtcacccatg acgaggacgt tggccgccgc  
 600  
 tggcagcgca tccttcatct gcacgacggc cggatcgtct ctgaccacgt acgtcattcc  
 660  
 gatgggaggt ggtgatcatg actataacgc cccctatcga accgggaacc gccgatcaaa  
 720  
 ggatcccgtc cctccccgtc cccgagcccc tgggagctac gcccgacgt cttaccactg  
 780  
 ctgcgatcct cagcatgacc ctccgtgctt cagccgctga ccaactccacc tggcgggttg  
 840  
 cggtagttgc tttcgtgtc attgcaacca tcatcctcga cgtcactggc ggtgccgtca  
 900  
 tgatgtggca tctaccggga gacaactctg gcttctacaa gctgacctcg acaattg  
 957

<210> 1994  
 <211> 224  
 <212> PRT  
 <213> Homo sapiens

<400> 1994  
 Xaa Lys Thr Tyr Gly Met Thr Arg Ala Leu Asp His Ile Asp Ile Ala  
 1 5 10 15  
 Ile Pro Ala Gly Gln Ser Val Ala Val Met Gly Pro Ser Gly Ser Gly

```

                20                25                30
Lys Thr Thr Leu Leu His Cys Leu Ser Gly Ile Leu Ser Pro Asp Ser
      35      40      45
Gly Ser Ile Glu Leu Ala Leu Pro Asp Arg Thr Val Asn Val Glu Asn
      50      55      60
Leu Ser Asn Glu Gly Arg Ala Lys Leu Arg Arg Gln Ser Leu Gly Phe
65      70      75      80
Val Phe Gln Gln Gly Met Leu Val Pro Glu Leu Thr Ala Val Glu Asn
      85      90      95
Thr Ala Leu Pro Leu Met Leu Asn Gly Val Ser Gln Thr Asp Ala Val
      100      105      110
Arg Tyr Ala Thr Gln Trp Leu Glu Ser Met Gly Leu Gly Gly Met Glu
      115      120      125
Asp Arg Arg Ile Gly Gln Leu Ser Gly Gly Gln Ala Gln Arg Val Thr
      130      135      140
Ile Ala Arg Ser Gln Val Ile Asp Pro Ser Ile Val Phe Ala Asp Glu
145      150      155      160
Pro Thr Gly Ala Leu Asp Ser Ala Thr Ala Val Glu Val Met Ala Ile
      165      170      175
Leu Leu Ser Ala Thr Thr Gly Arg Gly Arg Thr Leu Val Val Val Thr
      180      185      190
His Asp Glu Asp Val Ala Arg Arg Cys Gln Arg Ile Leu His Leu His
      195      200      205
Asp Gly Arg Ile Val Ser Asp His Val Arg His Ser Asp Gly Arg Trp
      210      215      220

```

<210> 1995  
 <211> 285  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1995
catcaccacc attatcaaca ccatcatcac caccattatc acctttatca ccaccatcat
60
caccatcacc accatcatca ctaccacatc cagcccatc atcatgtgat gactctcaat
120
actgtcctca tcatgtgtga cttggactgt ggaccagccc ctcgggctct gctctgctga
180
cctatatctt ttgtctcttg ttcttgagaa gctgggagtt gagaccagtt aaggtgttgt
240
acagacactt gtgaccccaa attccatgag acagaggacc tcccn
285

```

<210> 1996  
 <211> 59  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1996
His His His His Tyr Gln His His His His His Tyr His Leu Tyr
1      5      10      15
His His His His His His His His His His Tyr His His His Ala
20      25      30
His His His Val Met Thr Leu Asn Thr Val Leu Ile Met Cys Asp Leu

```

35 40 45  
 Asp Cys Gly Pro Ala Pro Arg Ala Leu Leu Cys  
 50 55

<210> 1997  
 <211> 313  
 <212> DNA  
 <213> Homo sapiens

<400> 1997  
 ccgctggtgg tgggtgctgct gattggcatg gccatctata ccttccgcaa gaaagacctg  
 60  
 ggcaagctgc acaagccggg cagcatcggc cggcgcgaga tgctggtggg gctggccatc  
 120  
 ggtggcggca tcggttttta cgacggcctg ttcgggcccgg gtaccggcag tttcctgatg  
 180  
 ttctgttcg tgcggttttt gcgttttgat ttcttgcatg cttctgccgc ggccaagggt  
 240  
 gtcaacctgg ccaccaatgt ggcggcactg tgctttttca ttcccagcgg caatgtgctg  
 300  
 tatggctacg cgt  
 313

<210> 1998  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 1998  
 Pro Leu Val Val Val Leu Leu Ile Gly Met Ala Ile Tyr Thr Phe Arg  
 1 5 10 15  
 Lys Lys Asp Leu Gly Lys Leu His Lys Pro Val Ser Ile Gly Arg Arg  
 20 25 30  
 Glu Met Leu Val Gly Leu Ala Ile Gly Gly Ile Gly Phe Tyr Asp  
 35 40 45  
 Gly Leu Phe Gly Pro Gly Thr Gly Ser Phe Leu Met Phe Leu Phe Val  
 50 55 60  
 Arg Phe Leu Arg Phe Asp Phe Leu His Ala Ser Ala Ala Lys Val  
 65 70 75 80  
 Val Asn Leu Ala Thr Asn Val Ala Ala Leu Cys Phe Phe Ile Pro Ser  
 85 90 95  
 Gly Asn Val Leu Tyr Gly Tyr Ala  
 100

<210> 1999  
 <211> 399  
 <212> DNA  
 <213> Homo sapiens

<400> 1999  
 ccgcggcgca agttggaatg gcaaaacatt ttcattcccc gcgagcaagg tagcttgagt  
 60  
 tccactgcgc agagggcaga tgtgaagtac tccggtactg ttcattttac cgggtgttggc  
 120

ggaagaatgg atcttactct cgctgaccct gagattgtcg ttaacaatgg cgatgatcat  
 180  
 gtgattatgt ctgtgaagtc caagactatg gtcgggcagt tgggtgacta tggccgtata  
 240  
 accttcgttg atatgaccgg ctctattacg caggggtcaaa acgatgcagc tcaggttgtg  
 300  
 gggaccaatg tcaagctgaa tagccaagcc gtcgatgcat tcgctggctt ctatcaagct  
 360  
 ggaaagccca tggatgacat cgattcgtcc ttaaagctt  
 399

<210> 2000

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2000

Met	Asp	Leu	Thr	Leu	Ala	Asp	Pro	Glu	Ile	Val	Val	Asn	Asn	Gly	Asp
1				5						10				15	
Asp	His	Val	Ile	Met	Ser	Val	Lys	Ser	Lys	Thr	Met	Val	Gly	Gln	Leu
		20						25					30		
Val	Asp	Tyr	Gly	Arg	Ile	Thr	Phe	Val	Asp	Met	Thr	Gly	Ser	Ile	Thr
		35				40						45			
Gln	Gly	Gln	Asn	Asp	Ala	Ala	Gln	Val	Val	Gly	Thr	Asn	Val	Lys	Leu
		50				55					60				
Asn	Ser	Gln	Ala	Val	Asp	Ala	Phe	Ala	Gly	Phe	Tyr	Gln	Ala	Gly	Lys
65					70				75					80	
Pro	Met	Asp	Asp	Ile	Asp	Ser	Ser	Leu	Lys	Leu					
				85					90						

<210> 2001

<211> 1434

<212> DNA

<213> Homo sapiens

<400> 2001

nngaataag gacgtcataa tttgctgatc agcagtgag ctgactggag gagggacaaa  
 60  
 tttggcagga cccactgca ctatgcagct gctaacggta gctaccagtg tgcagtaaca  
 120  
 ttggtgactg ctggggcagg tgtcaacgag gccgactgta aaggctgctc tcccctccac  
 180  
 tacgctgccc cttctgacac ttacaggnag agcggaaacc catacacctt ccagccatga  
 240  
 tgccgaagag ganncgagcc actgaaggag tcccgcagga aggaggcctt cttctgtctg  
 300  
 gagttcttac tggataacgg tgcagacccc tccctgctgg acaggcaggg ctacacagct  
 360  
 gtgcactatg cagccgccta tggcaacaga cagaacctcg aactgctctt agaaatgtcc  
 420  
 tttaactgcc tggaggatgt ggagagcacc attccagtca gccctttgca cttagctgcc  
 480  
 tacaacggtc actgtgaagc cttgaagacg ctggcggaga cgctggtgaa tctggacgta  
 540

agggaccaca agggccggac cgcactcttc ctggccacgg agcgcggctc tactgagtgt  
 600  
 gtggaggtgc ttacagccca cggcgccctct gccctcatca aggagcgcaa gcgcaagtgg  
 660  
 acaccctgc acgcgcgtgc tgccctctggc cacactgact ccctgcactt gctgatcgac  
 720  
 agtggggaac gagctgacat cacagatgtc atggatgcct atggacagac cccactgatg  
 780  
 ctggccatca tgaatggcca tgtggactgt gtacatctgc tgctagagaa aggatccaca  
 840  
 gctgatgctg ctgacctccg gggccgcact gccctccacc gcggggcagt gactggctgt  
 900  
 gaggactgcc tggtgcctt gctggaccac gacgcatttg tgctgtgccg agactttaag  
 960  
 ggccgcacgc ccattcacct ggctcagcc tgtggccaca ctgcagtact gcggaccctg  
 1020  
 ctgcaggtg ccccttccac agatccctg gatgccgggg tggattacag cggatactcg  
 1080  
 cccatgcact gggcctcta cactggacat gaagattgtc tggagttgtt acttgaacac  
 1140  
 agcccgtttt cgtacctgga aggaacccc ttcactcctt tgcaactgtc agtgattaat  
 1200  
 aaccaagaca gcaccacaga gatgctactg ggagctctgg gtgccaagat tgtgaacagc  
 1260  
 cgagatgcca aaggacggac ccccttcac gccgctgcct tcgcggacaa tgtctctggg  
 1320  
 ctccggatgc tgctgcagca tcaagctgag gtgaacgcca ctgaccacac tggccgcact  
 1380  
 gcgctcatga cggcggtga gaacgggcag accgctgctg tggaaatttct gctg  
 1434

<210> 2002

<211> 79

<212> PRT

<213> Homo sapiens

<400> 2002

Xaa	Asn	Glu	Gly	Arg	His	Asn	Leu	Leu	Ile	Ser	Ser	Ala	Ala	Asp	Trp
1			5					10						15	
Arg	Arg	Asp	Lys	Phe	Gly	Arg	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Asn
		20					25					30			
Gly	Ser	Tyr	Gln	Cys	Ala	Val	Thr	Leu	Val	Thr	Ala	Gly	Ala	Gly	Val
		35					40					45			
Asn	Glu	Ala	Asp	Cys	Lys	Gly	Cys	Ser	Pro	Leu	His	Tyr	Ala	Ala	Ala
	50					55				60					
Ser	Asp	Thr	Tyr	Arg	Xaa	Ser	Gly	Thr	Pro	Tyr	Thr	Phe	Gln	Pro	
65				70						75					

<210> 2003

<211> 688

<212> DNA

<213> Homo sapiens

<400> 2003









1527

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2013

gcgtatcccc acggtacgg catgaccgag cttatcggcc cggacctgtc caccgtcgaa  
 60  
 gccttgctcg cccaggteca cagcacacaa accccggtgt acctggccaa tatcaatgcc  
 120  
 gataaccaga cggttatcgc gggcagcgac ggggcaatga aagcagtcgc caatctggtc  
 180  
 cgcggaacg gcgtcgccaa acgcttgccc gtcagcgtgc cgtcccattg tgcgtgctg  
 240  
 gaaaaacctg ccgaaacact ggcccaagcc ttcgctgaag tgacgctgaa aacgccnncn  
 300  
 nnnccnncn  
 309

&lt;210&gt; 2014

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2014

Ala	Tyr	Pro	His	Gly	Tyr	Gly	Met	Thr	Ala	Leu	Ile	Gly	Pro	Asp	Leu
1				5					10					15	
Ser	Thr	Val	Glu	Ala	Leu	Leu	Ala	Gln	Val	His	Ser	Thr	Gln	Thr	Pro
			20				25						30		
Val	Tyr	Leu	Ala	Asn	Ile	Asn	Ala	Asp	Asn	Gln	Thr	Val	Ile	Ala	Gly
		35				40					45				
Ser	Asp	Gly	Ala	Met	Lys	Ala	Val	Ala	Asn	Leu	Val	Arg	Gly	Asn	Gly
	50					55				60					
Val	Ala	Lys	Arg	Leu	Ala	Val	Ser	Val	Pro	Ser	His	Cys	Ala	Leu	Leu
65				70					75					80	
Glu	Lys	Pro	Ala	Glu	Thr	Leu	Ala	Gln	Ala	Phe	Ala	Glu	Val	Thr	Leu
			85				90						95		
Lys	Thr	Pro	Xaa	Xaa	Pro	Xaa									
			100												

&lt;210&gt; 2015

&lt;211&gt; 329

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2015

acgcgtgcca tgctcggtat ccgccgccac caccctgtct ttgggaccgg cgagttcacc  
 60  
 gatctaggcg ggccggacat ggcagtgatg tccttcttac gtcacaacga gcacgaaacg  
 120  
 gtcctgtgcc tggctaattct ctccgatact gagcggacgg ttgcccttca ccttccacaa  
 180  
 ttcgcgggag tggcgggctc ttctctcatc catggtcagg acgcgcaacc agtaaaagct  
 240  
 gacggaacac tgctcgtacc gttgtggcca tatggctatc gatggctgca gatgtccggt  
 300

gaggagaggt catgaccgct tgggaagac  
329

<210> 2016

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2016

Thr	Arg	Ala	Met	Leu	Gly	Ile	Arg	Arg	His	His	Pro	Val	Phe	Gly	Thr
1				5					10					15	
Gly	Glu	Phe	Thr	Asp	Leu	Gly	Gly	Pro	Asp	Met	Ala	Val	Met	Ser	Phe
			20					25					30		
Leu	Arg	His	Asn	Glu	His	Glu	Thr	Val	Leu	Cys	Leu	Ala	Asn	Leu	Ser
		35					40					45			
Asp	Thr	Glu	Arg	Thr	Val	Ala	Leu	His	Leu	Pro	Gln	Phe	Ala	Gly	Val
	50					55					60				
Ala	Gly	Ser	Ser	Leu	Ile	His	Gly	Gln	Asp	Ala	Gln	Pro	Val	Lys	Ala
65				70						75				80	
Asp	Gly	Thr	Leu	Ser	Val	Pro	Leu	Trp	Pro	Tyr	Gly	Tyr	Arg	Trp	Leu
			85					90						95	
Gln	Met	Ser	Gly	Glu	Glu	Arg	Ser								
			100												

<210> 2017

<211> 457

<212> DNA

<213> Homo sapiens

<400> 2017

accaagggtca gattcatggc ctcttttcct ccagcggcca gcaggaaacg cggggagccc  
60  
ttgatcatct cgcacatcaa gaaaggcagc gtggcacaca ggacgggcac cctggagcca  
120  
ggcgacaagc tactggccat tgacaatatc cgccctggaca actgccccat ggaggacgac  
180  
gtgcaaattc tgcggcagtg cgaggacctg gtgaagctga agatccggaa ggacgaggac  
240  
aactctgatg agctggagac cacagggtgcc gtcagttaca cagtggagct gaagcgctac  
300  
gggggtcccc tgggcatcac catttcgggc acggaggaac cttttgacct cattttcatc  
360  
tcaggcctcc ccaaactgtg cctggctgag aggactggtg ccatccagtg ggggaaccgc  
420  
ttcggaccat aacaacttta ttctcaggga cggacca  
457

<210> 2018

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2018

Thr Lys Val Arg Phe Met Ala Ser Phe Pro Pro Ala Ala Ser Arg Lys

```

      1           5           10           15
Arg Gly Glu Pro Leu Ile Ile Ser Asp Ile Lys Lys Gly Ser Val Ala
      20           25           30
His Arg Thr Gly Thr Leu Glu Pro Gly Asp Lys Leu Leu Ala Ile Asp
      35           40           45
Asn Ile Arg Leu Asp Asn Cys Pro Met Glu Asp Ala Val Gln Ile Leu
      50           55           60
Arg Gln Cys Glu Asp Leu Val Lys Leu Lys Ile Arg Lys Asp Glu Asp
      65           70           75           80
Asn Ser Asp Glu Leu Glu Thr Thr Gly Ala Val Ser Tyr Thr Val Glu
      85           90           95
Leu Lys Arg Tyr Gly Gly Pro Leu Gly Ile Thr Ile Ser Gly Thr Glu
      100          105          110
Glu Pro Phe Asp Pro Ile Phe Ile Ser Gly Leu Pro Lys Arg Gly Leu
      115          120          125
Ala Glu Arg Thr Gly Ala Ile Gln Trp Gly Asn Arg Phe Gly Pro
      130          135          140

```

<210> 2019  
 <211> 483  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2019
cgcgtcggcg acgattttat cctcgggggtt cggtataccg ccgatgaatg tctcgagaac
60
ggcaccggca aggcggaagg catcgaaatc tccagacggc tgaaggagag cggcctgac
120
gactatctca acgtcatcag gggacatatc gacaccgac ccggcctgac cgacgtcatc
180
cccattcagg gcattggcgag cgcgccgcat cttgatttcg caggcgaaat ccgcgcggcg
240
accagcttcc ccgttttcca tgccgccaaa attcaggatg tcgccaccgc ccggcatgcg
300
attgccgccc gcaaggctga catgatcggc atgacccgcg ccacatgac cgatccgcat
360
atcgtccgca agatcatgga aaaacaggag gaggacatcc gccctgcgt cggcgccaat
420
tattgtcttg atcgcattta tcaaggcggc ctgccttct gcattcaca tgcggcaacc
480
ggc
483

```

<210> 2020  
 <211> 161  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2020
Arg Val Gly Asp Asp Phe Ile Leu Gly Val Arg Tyr Thr Ala Asp Glu
1           5           10           15
Cys Leu Glu Asn Gly Thr Gly Lys Ala Glu Gly Ile Glu Ile Ser Arg
20          25          30
Arg Leu Lys Glu Ser Gly Leu Ile Asp Tyr Leu Asn Val Ile Arg Gly

```

35	40	45	
His Ile Asp Thr Asp Pro Gly	Leu Thr Asp Val	Ile Pro Ile Gln Gly	
50	55	60	
Met Ala Ser Ala Pro His Leu Asp Phe Ala Gly	Glu Ile Arg Ala Ala		
65	70	75	80
Thr Ser Phe Pro Val Phe His Ala Ala Lys Ile Gln Asp Val Ala Thr			
85	90	95	
Ala Arg His Ala Ile Ala Ala Gly Lys Val Asp Met Ile Gly Met Thr			
100	105	110	
Arg Ala His Met Thr Asp Pro His Ile Val Arg Lys Ile Met Glu Lys			
115	120	125	
Gln Glu Asp Ile Arg Pro Cys Val Gly Ala Asn Tyr Cys Leu Asp			
130	135	140	
Arg Ile Tyr Gln Gly Gly Leu Ala Phe Cys Ile His Asn Ala Ala Thr			
145	150	155	160
Gly			

&lt;210&gt; 2021

&lt;211&gt; 797

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2021

```

ngaattcggg cactggctta actcggagca cagcttcacc acgacccatg acaaggaagg
60
gtttctcctg agaagggcca gcaagtgtgt ttaaggacat cctccctcct gtcctgcag
120
ccctcctccc tcagtactcg cgagactacg aaaacacgtg ctgaaatgga cccccgtcc
180
gggagccagt gttccgtcac cccagaagcc atactcaata atgaaaagct ggtcttgccg
240
ccccgcattc ccagagtga cggctggctg ttaccctcgc actacttcca ggtggtgacc
300
tggtgtgtct tcgtgggctt ttctcgggcc accttcggga tcttcattcc cttcctgctt
360
cacgcgtgga aatacatcgc ctatgtggta tccttttcat cgtggcatgg tctaagcggg
420
aggggttcct ggaggacct gcgatggacc tggctgtggg gtctgggcca tggctgcccg
480
gtggcaccag tcacctgtcc tgggccagac tatgtcccc gagcctgcag gtgggcccag
540
tggcccttta tggttttggc cagccccggg taagggtcag gccaggccag cgttggctga
600
gggagttccg gagagggaat ctgtcaggag ggacagcagc cccctggcgt ggcgcaggac
660
ccgcccgtct ggcagccttc cgctaaaatc cctgcgcagc attttgcaca tggccagccc
720
ctttctcctt gcccctgggt ccaaggagga acagcgcctat gcccgcagg tcggcagcct
780
gcgtttccat gccaagc
797

```

&lt;210&gt; 2022

<211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 2022  
 Met Asp Thr Arg Ser Gly Ser Gln Cys Ser Val Thr Pro Glu Ala Ile  
   1                  5                  10                  15  
 Leu Asn Asn Glu Lys Leu Val Leu Pro Pro Arg Ile Ser Arg Val Asn  
           20                  25                  30  
 Gly Trp Ser Leu Pro Leu His Tyr Phe Gln Val Val Thr Trp Ala Val  
           35                  40                  45  
 Phe Val Gly Leu Ser Ser Ala Thr Phe Gly Ile Phe Ile Pro Phe Leu  
           50                  55                  60  
 Pro His Ala Trp Lys Tyr Ile Ala Tyr Val Val Ser Phe Ser Ser Trp  
   65                  70                  75                  80  
 His Gly Leu Ser Gly Arg Gly Ser Trp Arg Thr Leu Arg Trp Thr Trp  
           85                  90                  95  
 Leu Trp Gly Leu Gly His Gly Cys Pro Val Ala Pro Val Thr Cys Pro  
           100                  105                  110  
 Gly Pro Asp Tyr Val Pro Arg Ala Cys Arg Trp Ala Gln Trp Pro Leu  
           115                  120                  125  
 Met Val Leu Ala Ser Pro Gly  
       130                  135

<210> 2023  
 <211> 462  
 <212> DNA  
 <213> Homo sapiens

<400> 2023  
 naatctccga cgatccctgc cgacgtgctc gccggtgctc tcaagcaggc taaggaggct  
 60  
 cgcaccgcga tccttgaggt gatgaacgag gccatcgatt ctcccgatga aatggccccg  
 120  
 actgtccgcg gcatacattac cgtccacatc ccagtggaca agatcgggtga ggtcatcggc  
 180  
 cccaagggca agatgattaa ccagattcag gacgacactg gcgccaatat ctctattgag  
 240  
 gacgatggca cgattttcat cggggctgat aacggagatt cggccgagtc tgcccgttcg  
 300  
 atgatcaacg cgatcgctaa cccacagatg cccgaggtcg gtgagcggtta cctcggcacc  
 360  
 gtcgtcaaga cgacgagctt tggcgctttc gtctctctgc tgcccggcaa ggatgggtctg  
 420  
 ttgcacatct ccaagatgcg tgaccttaac gacggtaaac gc  
 462

<210> 2024  
 <211> 154  
 <212> PRT  
 <213> Homo sapiens

<400> 2024  
 Xaa Ser Pro Thr Ile Pro Ala Asp Val Leu Ala Gly Ala Leu Lys Gln

1                    5                    10                    15  
 Ala Lys Glu Ala Arg Thr Ala Ile Leu Glu Val Met Asn Glu Ala Ile  
                   20                    25                    30  
 Asp Ser Pro Asp Glu Met Ala Pro Thr Ala Pro Arg Ile Ile Thr Val  
                   35                    40                    45  
 His Ile Pro Val Asp Lys Ile Gly Glu Val Ile Gly Pro Lys Gly Lys  
                   50                    55                    60  
 Met Ile Asn Gln Ile Gln Asp Asp Thr Gly Ala Asn Ile Ser Ile Glu  
 65                    70                    75                    80  
 Asp Asp Gly Thr Ile Phe Ile Gly Ala Asp Asn Gly Asp Ser Ala Glu  
                   85                    90                    95  
 Ser Ala Arg Ser Met Ile Asn Ala Ile Ala Asn Pro Gln Met Pro Glu  
                   100                    105                    110  
 Val Gly Glu Arg Tyr Leu Gly Thr Val Val Lys Thr Thr Ser Phe Gly  
                   115                    120                    125  
 Ala Phe Val Ser Leu Leu Pro Gly Lys Asp Gly Leu Leu His Ile Ser  
 130                    135                    140  
 Lys Met Arg Asp Leu Asn Asp Gly Lys Arg  
 145                    150

&lt;210&gt; 2025

&lt;211&gt; 872

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2025

cgtggttaacg atttacagga aagaacagct ggaactcgtg ctgggataac caggtacaag  
 60  
 tgctctctgc agagaataag tgcacacagg ttggtgtctt ctgaccgaga gccctcctga  
 120  
 agggaggtct gtacctcttc cctcatctca ttttacacaa ggcgacaggt cagaggccag  
 180  
 ggtgggacga gagcgagggg gcaactgtctc tggcagcagc acttgccact ccacaatgtg  
 240  
 gagaccagaa cggcacccca gagagcacgg gggaaatggc tcattctttaa aacaatggca  
 300  
 gaagaaatcc agccaaggtc acttttcctg tgtgagcatg ttttaaggcca gagagtggct  
 360  
 acttctctgc ctctgcagc tccctcagtg tggcttggag gagttggcga agcttccaga  
 420  
 acacgctgga ggctgctctc cgggtgttcc cactggggac ccaggggtct gcacattcct  
 480  
 gcaccgcctc ctgtaactgc agctgaagct ggaaagagac cgcagagctc ttgagaggcg  
 540  
 cggaataacca atggcgaaat atttgtcac agatgacctg caggttgttg tttacgcgct  
 600  
 gcgctccgca tttgttgact cgtaaatcac atcttgaaaa acagtcaaag aaattgcagt  
 660  
 cttcatctcc tgtgcagttt tgctcaagga tttccctcat tttaggttca aaaaaggcca  
 720  
 tgccacatc aatagccacc actgtgaagt cgctccggat ggcaaagttt tccggcttga  
 780  
 tgtcgcagag gtggaggcgg tgggtacagt cctgtcgaa atggttcccc atgtccaaga  
 840

agctgagtgc gagggccctg atggccctgg cc  
872

<210> 2026  
<211> 157  
<212> PRT  
<213> Homo sapiens

<400> 2026  
Met Gly Asn His Phe Asp Arg Asp Cys Thr His Arg Leu His Leu Cys  
1 5 10 15  
Asp Ile Lys Pro Glu Asn Phe Ala Ile Arg Ser Asp Phe Thr Val Val  
20 25 30  
Ala Ile Asp Val Asp Met Ala Phe Phe Glu Pro Lys Met Arg Glu Ile  
35 40 45  
Leu Glu Gln Asn Cys Thr Gly Asp Glu Asp Cys Asn Phe Phe Asp Cys  
50 55 60  
Phe Ser Arg Cys Asp Leu Arg Val Asn Lys Cys Gly Ala Gln Arg Val  
65 70 75 80  
Asn Asn Asn Leu Gln Val Ile Cys Asp Lys Ile Phe Arg His Trp Phe  
85 90 95  
Ser Ala Pro Leu Lys Ser Ser Ala Val Ser Phe Gln Leu Gln Leu Gln  
100 105 110  
Leu Gln Glu Ala Val Gln Glu Cys Ala Asp Pro Gly Val Pro Ser Gly  
115 120 125  
Asn Thr Arg Arg Ala Ala Ser Ser Val Phe Trp Lys Leu Arg Gln Leu  
130 135 140  
Leu Gln Ala Thr Leu Arg Glu Leu Gln Glu Ala Glu Lys  
145 150 155

<210> 2027  
<211> 721  
<212> DNA  
<213> Homo sapiens

<400> 2027  
tgtacaatga cagaccaagt ataaggcttt gggtgagaga ccagctttta aatattgaaa  
60  
gacaaatata gtgtaaaagg cgcaatggaa tttgtatagt gaaggagatt ctctagtccc  
120  
agggttgtaa tgtcacttct gtctaattca ttacagaatt acagaatcaa atcatgttag  
180  
ccctagaaga aactgcagat cttttgttc aatcttctca ttatatagga aaggaaatct  
240  
gagggccagt gcaatggttt gccaaaggcca cacaactagt tagtggaagg atccaggcat  
300  
tctaattcct ttctttcact aatacatttg gactgctcta cagaattact tctgtctgat  
360  
actatccact ttgaagagta gctagcatat agtagccatt tacttttggc tcaattaaaa  
420  
gcaaacattt ttgggacaaa atcaggcttt cctgattact tcttagataa cagagcccac  
480  
acagtattaa aacatgcagc ctttctttat gcaaaaagat tgaatatgga gccacttgaa  
540



tcttaaactt cagtctgcag ctataaccaa tatcatcaga agttatacac aattggcaaa  
 600  
 agaatatgctt attctgcca aatacttgct cagtcactag gatcatttca cttttttgaa  
 660  
 taccatttgc tttggggagg gaagtattgc cagaccgtga attcattatt acctctgac  
 720  
 a  
 721

<210> 2028

<211> 114

<212> PRT

<213> Homo sapiens

<400> 2028

Met	Asn	Ser	Arg	Ser	Gly	Asn	Thr	Ser	Leu	Pro	Lys	Ala	Asn	Gly	Ile
1				5				10					15		
Gln	Lys	Ser	Glu	Met	Ile	Leu	Val	Thr	Gly	Gln	Val	Phe	Gly	Gln	Asn
			20					25					30		
Lys	Leu	Phe	Phe	Cys	Gln	Leu	Cys	Ile	Thr	Ser	Asp	Asp	Ile	Gly	Tyr
		35				40						45			
Ser	Cys	Arg	Leu	Lys	Phe	Lys	Ile	Gln	Val	Ala	Pro	Tyr	Ser	Ile	Phe
	50					55					60				
Leu	His	Lys	Glu	Arg	Leu	His	Val	Leu	Ile	Leu	Cys	Gly	Leu	Cys	Tyr
65					70					75				80	
Leu	Arg	Ser	Asn	Gln	Glu	Ser	Leu	Ile	Leu	Ser	Gln	Lys	Cys	Leu	Leu
			85						90					95	
Leu	Ile	Glu	Pro	Lys	Val	Asn	Gly	Tyr	Tyr	Met	Leu	Ala	Thr	Leu	Gln
			100					105						110	
Ser	Gly														

<210> 2029

<211> 8028

<212> DNA

<213> Homo sapiens

<400> 2029

ngggagtcca tgggtgattgg accagaagcc cgcgacggcg ggcggggatt ggctgcgcgc  
 60  
 tgggtcaggg aagcctggga agggcgaggag gaaggagact agagcaggaa gagcagcggc  
 120  
 gaggcggcgg tgggtggctga gtccgtggtg gcagaggcga aggcgacagc tctagggggtt  
 180  
 ggcaccggcc ccgagaggag gatgcgggtc cggatagggc tgacgtgct gctgtgtgctg  
 240  
 gtgctgctga gcttggcctc ggcgtcctcg gatgaagaag gcagccagga tgaatcctta  
 300  
 gattccaaga ctactttgac atcagatgag tcagtaaagg accatactac tgcaggcaga  
 360  
 gtagtgtctg gtcaaattatt tcttgattca gaagaatctg aattagaatc ctctattcaa  
 420  
 gaagaggaag acagcctcaa gagccaagag ggggaaagtg tcacagaaga tatcagcttt  
 480

ctagagtctc caaatccaga aaacaaggac tatgaagagc caaagaaagt acggaaacca  
540  
gctttgaccg ccattgaagg cacagcacat ggggagccct gccacttccc ttttcttttc  
600  
ctagataagg agtatgatga atgtacatca gatgggaggg aagatggcag actgtggtgt  
660  
gctacaacct atgactacaa agcagatgaa aagtggggct tttgtgaaac tgaagaagag  
720  
gctgctaaga gacggcagat gcaggaagca gaaatgatgt atcaaaactgg aatgaaaatc  
780  
cttaatggaa gcaataagaa aagccaaaaa agagaagcat atcggtatct ccaaaaggca  
840  
gcaagcatga accataccaa agccctggag agagtgtcat atgctctttt atttgggtgat  
900  
tacttgccac agaatatcca ggcagcgaga gagatgtttg agaagctgac tgaggaaggc  
960  
tctcccaagg gacagactgc tcttggtctt ctgtatgcct ctggacttgg tgttaattca  
1020  
agtcaggcaa aggctcttgt atattataca tttggagctc ttgggggcaa tctaatagcc  
1080  
cacatggttt tgggttacag atactgggct ggcacggcg tcctccagag ttgtgaatct  
1140  
gcctgactc actatcgtct tgttgccaat catgttgcta gtgatatctc gctaacagga  
1200  
ggctcagtag tacagagaat acggctgcct gatgaagtgg aaaatccagg aatgaacagt  
1260  
ggaatgctag aagaagattt gattcaatat taccagttcc tagctgaaaa aggtgatgta  
1320  
caagcacagg ttggtcttgg acaactgcac ctgcacggag ggcgtggagt agaacagaat  
1380  
catcagagag catttgacta cttcaattta gcagcaaatg ctggcaattc acatgccatg  
1440  
gccttttttg gaaagatgta ttcggaagga agtgacattg tacctcagag taatgagaca  
1500  
gctctccact actttaagaa agctgctgac atgggcaacc cagttggaca gagtgggctt  
1560  
ggaatggcct acctctatgg gagaggagt caagttaatt atgatctagc ccttaagtat  
1620  
ttccgaaaag ctgctgaaca aggtgggtg gatgggcagc tacagcttgg ttccatgtac  
1680  
tataatggca ttggagtcaa gagagattat aaacaggcct tgaagtattt taatttagct  
1740  
tctcaggag gccatatctt ggctttctat aacctagctc agatgcatgc cagtggcacc  
1800  
ggcgtgatgc gatcatgtca cactgcagtg gagttgttta agaattgatg tgaacgaggc  
1860  
cgttggtctg aaaggcttat gactgcctat aacagctata aagatggcga ttacaatgct  
1920  
gcagtgatcc agtacctcct cctggctgaa cagggtatg aagtggcaca aagcaatgca  
1980  
gcctttatc ttgatcagag agaagcaagc attgtagggt agaattgaaac ttatcccaga  
2040  
gctttgctac attggaacag ggccgcctct caaggctata ctgtggctag aattaagctc  
2100

ggagactacc atttctatgg gtttggcacc gatgtagatt atgaaactgc atttattcat  
2160  
taccgtctgg cttctgagca gcaacacagt gcacaagcta tgtttaatct gggatatatg  
2220  
catgagaaag gactgggcat taaacaggat attcaccttg cgaacggtt ttatgacatg  
2280  
gcagctgaag ccagcccaga tgcacaagtt ccagtcttcc tagccctctg caaattgggc  
2340  
gtcgtctatt tcttgagta catacgggaa acaaacattc gagatatgtt cacccaactt  
2400  
gatatggacc agcttttggg acctgagtgg gacctttacc tcatgaccat cattgctgtg  
2460  
ctgttgggaa cagtcatagc ttacaggcaa aggcagcacc aagacatgcc tgcacccagg  
2520  
cctccagggc cacggccagc tccaccccag caggaggggc caccagagca gcagccacca  
2580  
cagtaatagg cactgggtcc agccttgatc agtgacagcg aaggaaagta tctgctggga  
2640  
acacttgcac ttgatttagg accttggatc agtggtcacc tcccagaaga ggcacggcac  
2700  
aaggaagcat tgaattccta aagctgctta gaatctgatg cctttatttt cagggataag  
2760  
taactcttac ctaaactgag ctgaatgttt gtttcagtgc catatggaat aacaactttc  
2820  
agtggctttt ttttttcttt tctggaaaca tatgtgagac actcagagta atgtctactg  
2880  
tatccagcta tctttcttgg atccttttgg tcattatttc agtgtgcata agttcttaat  
2940  
gtcaaccatc ttttaaggat tgtgcatcga cactaaaaac tgatcagtgt aaaaaggaaa  
3000  
accagttgc aagtttaaac gtgttcgaaa gtctgaaaat agaacttgcc ttttaagtta  
3060  
aaaaaaaaa aaaagctatc ttgaaaatgt tttggaactg cgataactga gaaacttctt  
3120  
accagtccac atgcaattaa acatattcag catatttgtt attttaaaag ggagggttgg  
3180  
gaggtttctt attggtgatt gtcacacggc ataccatact cctctccttc aaagaatgaa  
3240  
aggccttgtt aaggagtttt ttgtgagctt tacttctttg gaatggaata tacttatgca  
3300  
aaaccttgtg aactgactcc ttgactaac gcgagtttgc cccacctact ctgtaatttg  
3360  
cttgtttgtt ttgaatataa cagagccttg atccagaagc cagaggatgg actaagtggg  
3420  
agaaattaga aaacaaaacg aactctgggt ggggtactac gatcacagac acagacatac  
3480  
ttttcctaaa gttgaagcat ttgttcccag gatttatttt actttgcatt tttttttgca  
3540  
caaagaacac atcaccttcc tgaattcttt aaatatgaaa tatcattgcc agggatatggc  
3600  
ttacagtgc tactattata atactaaaac tcagagaatc aaagatggat taaactcagt  
3660  
ggttgatgaa agccaaaacc tggttgact gttctatact attcaggat ctttttattt  
3720

ctgatagttt tatattataa tagaaagcca gccactgctt agctatcata gtcaccattt  
3780  
tctcactgtt aacattagga aaatcaaggc tactatgctt caggattgtc tggttaaata  
3840  
gtaggggaaa aaaactgaag agtttcaaca taattacaca cgtgaaataa ttacagctta  
3900  
aactgaattt gtatttcatt ttattgtcag atgggtgggt tcaccagcct gtatcttgtc  
3960  
tgagactgca ttcgtatctg agcagggttt ctatgcctac tgatgtcagt atgtttatac  
4020  
taaccttcat gcttttttcc cagaatccct catctgccag aaaacttgaa aagtttatg  
4080  
cttgtagagt tgtactgctt tgatttttga agttggggta gtagttagaa ctgatttaa  
4140  
ctagtctata atgaacatga aggcctttat atatgaagtt gtataccttt ttgtgtttag  
4200  
agaattatgg gaaacctggt aagcaaaact ttcctcccag ataattgctt ccaaattcga  
4260  
agagttagtc accaagagag ccatatgtat gaaagcgtat ctgtgaaagg taggaaactt  
4320  
accccccta agtghtaatgt tgcttttaggc aactcttgta aatagtgaga ctgttttgg  
4380  
ctcttacatg tagagatttg agtgcagttg gtacagtact ttggtgtctc caccactgtc  
4440  
ccttctcccc gcttcaaaat aagtghtaat caggttagca gccacacttc cttcagaagg  
4500  
aactgttata atttatttaa aagttgaaaa accacccaag atgactacca actttcactt  
4560  
tttttttct gccatccacc ctcatTTTTc ctttagcaag atttttatat ctaactttcc  
4620  
ttccctccat tgagtacgtg ctttgagaaa acatttctta aaacagtgtg tgccacctaa  
4680  
ggctggatgg gaaagtgcag tcttgttgtt catataaaaa acacacttct tattagttaa  
4740  
cccaactgcc tttttctatt gttaatgttc tgaatttctt tttcttggct tgtttctact  
4800  
tcattttaac cctgggtcac ttgtgccag cagtttgtga atgggtgtct tcaaataact  
4860  
tagttcttat ggcttcactt aaagactgtc tcaaaaatac ttgtctctct tcttctttt  
4920  
tgttcatggg acatgggtacc taagcaaata ggagttgggt ttgggttttc tctaaaata  
4980  
atgctcaata cttacctaat caaatggcat ccatttgaat aaaatgacaa taactaaagc  
5040  
tagttaatgt cagtgcattt aaactaactc caggattcag gagttttaat gttagaattt  
5100  
agatttaaca gatagagtgt ggcttcattt gtccatggta gccatctct cctaagacct  
5160  
tttctagtct gtcttctctg cttcgaactt gatgacagta aaacctgtt tagtattctc  
5220  
ttgtgcattt gggttgttgg ttagccgact gtcttgaaac tattcatttt gcttctagt  
5280  
ttattttaca gaggtagcat tgggtgggtt tttttttttt ttctgtctct gtgtttgaag  
5340

tttcagtttc tgttttctag gtaaggctta tttttgatta gcagtcaatg gcaaagaaaa  
5400  
agtaaatcaa agatgacttc ttttcaaat gtatggccct tttattgcac ttttaactca  
5460  
gatgaattta taaattatta atcttgatac taaggatttg ttactttttt gcatattagg  
5520  
ttaattttta ccttacatgt gagagtctta ccactaagcc attctgtctc tgtactgttg  
5580  
ggaagttttg gaaacccctg ccagtgatct ggtgatgac tgatgattta tttaaagagc  
5640  
cgttgatgcc tccaggaaac ttaagtattt tattaatata tatataggaa ttttttttta  
5700  
ttttgctttg tctttctctc cttcttttta tcctcatgtt cattcttcaa accagtgttt  
5760  
tggaagtatg catgcaggcc tataaatgaa aaacacaatt ctttatgtgt atagcatgtg  
5820  
tattaatgtc taactacata cgcaaaaact tcctttacag aggttcggac taacatttca  
5880  
catgcacatt tcaaaacaag atgtgtcatg aaaacagccc ctttacctgc caagacaagc  
5940  
agggctatat ttcagtgaca gctgatattt gttttgaaag tgaatctcat aatatatata  
6000  
tgtattacac attattatga ctagaagtat gtaagaaatg atcagaacaa aagaaaattt  
6060  
ctattttcat gcaaatattt ttcatcagtc atcactctca aatataagtt aaaatataac  
6120  
actcctgaat gcctgaggca cgatctggat tttaaatgtg tggatttcat tgaaaagaag  
6180  
ctctccacc acttggtatt tcaagaaaat ttaaaacgat cccaaggaaa gatgatttgt  
6240  
atgttaaagt gactgcacaa gtaaaagtcc aatgttgtgt gcatgaaaag gattccttgg  
6300  
ttatgtgcag ggaatcatct cacatgctgt ttttcctatt tggtttgaga aacaggctga  
6360  
cactattctc ttgattaga aaataaactc ataaaactca taatgttgat ataataaga  
6420  
tgtaaccact ataaatatgt agaagaggaa gttttaaaag accttaagct ggcattgtga  
6480  
aggaacacca tggtagactc tttttgtaaa tgtattttgt atttaatgaa atgcagtata  
6540  
aaggttggtg aagtgttaata taattgtgta aacaaatcct gttaatagag agatgtacag  
6600  
aatcgttttg tactgtatct tgaaacttgt gaaataaaga ttccacctct ggttatcctg  
6660  
tatgtgttaa tataccacaa ccaagcacc tttccagaca gacttttttt aagctgaatg  
6720  
aatccaattt tttaatgttt ttgggaaatt cagaagcttc tgaaaacatt cacttggtgc  
6780  
aatttgaatt tatctttcat tttaaactcc tgaaattcag atttttacia gtccaatatt  
6840  
gccttaggga gaacatgaat ttgctaagaa atgttatctt ttaaatctct gatatctttg  
6900  
tcttgaagca gccttgatat gtagtaagcg tgattcactt tagcctgatt ataataattat  
6960

ttatctaaag tttgtttatg cattgccttg tcccaggaat tttttaagag gacttgcaga  
 7020  
 gacacgtacc acacagtaac atttagacta aatatgctct gagtaaagga gaaatgaaaa  
 7080  
 aatattaaat caagagtga catgtacaca aagtgaatt ggaagtgggc tacaaattta  
 7140  
 gccccagct tcccagcagg caactcaaag aggttaactga ggtaaaatgt tccagctcag  
 7200  
 aagcattgga tcttggataa aaagcctaca tgatgcaaac tgtggcaact gagatgtcag  
 7260  
 atctcaagat ctcaaattgt acttgtggga gcacagtcag tgaccccgaga tgacctgac  
 7320  
 tgacctaaaa gttgtggggg aagtcggatg tcagagcctt aacaccagca ggtgaccatc  
 7380  
 caacctgggg caatgcctgc ctgttcacca cttagcctct ttctggcaag tcattagaat  
 7440  
 gtcctccatc ttcattggct gcaacttgat gagctacagc ctctttccta acttccttta  
 7500  
 tgatgctagt ttaggttggg tataccagct tggaagtatg cttagattaa gttacagcag  
 7560  
 atacacaaat tagatgcaag taacaaaaat cagaatttct gtagtagaaa ctacgaaaaa  
 7620  
 taacaaaggaa agtttttact ttttgggtat ttttttacga ataagaaaaa gtgagcgtta  
 7680  
 atcagttcaa aaggaggtag tgctgtgtaa tgggctttgt acgttccttc tcatgtcact  
 7740  
 tacgtcacta cttcgccatc aaattgaaca agcttttaac tagatcctga aaattcacta  
 7800  
 tgctagtagt ttattggtag tattatattt tgagtagaac tctgattttc cctagaggcc  
 7860  
 aaattctttt tatctgggtt aatttctttt aaacataaca atgttaatgc tgaattgtat  
 7920  
 attaaatccc atttctaaaa accacacaat tttttctcat gtaagttgag tggaatgtgg  
 7980  
 ttagttaact gaatttgga tgttcatata aataatttgt tgctgctc  
 8028

<210> 2030

<211> 794

<212> PRT

<213> Homo sapiens

<400> 2030

Met	Arg	Val	Arg	Ile	Gly	Leu	Thr	Leu	Leu	Leu	Cys	Ala	Val	Leu	Leu
1				5				10						15	
Ser	Leu	Ala	Ser	Ala	Ser	Ser	Asp	Glu	Glu	Gly	Ser	Gln	Asp	Glu	Ser
			20				25						30		
Leu	Asp	Ser	Lys	Thr	Thr	Leu	Thr	Ser	Asp	Glu	Ser	Val	Lys	Asp	His
		35				40						45			
Thr	Thr	Ala	Gly	Arg	Val	Val	Ala	Gly	Gln	Ile	Phe	Leu	Asp	Ser	Glu
	50				55					60					
Glu	Ser	Glu	Leu	Glu	Ser	Ser	Ile	Gln	Glu	Glu	Glu	Asp	Ser	Leu	Lys
65				70				75						80	
Ser	Gln	Glu	Gly	Glu	Ser	Val	Thr	Glu	Asp	Ile	Ser	Phe	Leu	Glu	Ser

85								90				95				
Pro	Asn	Pro	Glu	Asn	Lys	Asp	Tyr	Glu	Glu	Pro	Lys	Lys	Val	Arg	Lys	
100								105				110				
Pro	Ala	Leu	Thr	Ala	Ile	Glu	Gly	Thr	Ala	His	Gly	Glu	Pro	Cys	His	
115				120				125								
Phe	Pro	Phe	Leu	Phe	Leu	Asp	Lys	Glu	Tyr	Asp	Glu	Cys	Thr	Ser	Asp	
130				135				140								
Gly	Arg	Glu	Asp	Gly	Arg	Leu	Trp	Cys	Ala	Thr	Thr	Tyr	Asp	Tyr	Lys	
145				150				155				160				
Ala	Asp	Glu	Lys	Trp	Gly	Phe	Cys	Glu	Thr	Glu	Glu	Glu	Ala	Ala	Lys	
165				170				175								
Arg	Arg	Gln	Met	Gln	Glu	Ala	Glu	Met	Met	Tyr	Gln	Thr	Gly	Met	Lys	
180				185				190								
Ile	Leu	Asn	Gly	Ser	Asn	Lys	Lys	Ser	Gln	Lys	Arg	Glu	Ala	Tyr	Arg	
195				200				205								
Tyr	Leu	Gln	Lys	Ala	Ala	Ser	Met	Asn	His	Thr	Lys	Ala	Leu	Glu	Arg	
210				215				220								
Val	Ser	Tyr	Ala	Leu	Leu	Phe	Gly	Asp	Tyr	Leu	Pro	Gln	Asn	Ile	Gln	
225				230				235				240				
Ala	Ala	Arg	Glu	Met	Phe	Glu	Lys	Leu	Thr	Glu	Glu	Gly	Ser	Pro	Lys	
245				250				255								
Gly	Gln	Thr	Ala	Leu	Gly	Phe	Leu	Tyr	Ala	Ser	Gly	Leu	Gly	Val	Asn	
260				265				270								
Ser	Ser	Gln	Ala	Lys	Ala	Leu	Val	Tyr	Tyr	Thr	Phe	Gly	Ala	Leu	Gly	
275				280				285								
Gly	Asn	Leu	Ile	Ala	His	Met	Val	Leu	Gly	Tyr	Arg	Tyr	Trp	Ala	Gly	
290				295				300								
Ile	Gly	Val	Leu	Gln	Ser	Cys	Glu	Ser	Ala	Leu	Thr	His	Tyr	Arg	Leu	
305				310				315				320				
Val	Ala	Asn	His	Val	Ala	Ser	Asp	Ile	Ser	Leu	Thr	Gly	Gly	Ser	Val	
325				330				335								
Val	Gln	Arg	Ile	Arg	Leu	Pro	Asp	Glu	Val	Glu	Asn	Pro	Gly	Met	Asn	
340				345				350								
Ser	Gly	Met	Leu	Glu	Glu	Asp	Leu	Ile	Gln	Tyr	Tyr	Gln	Phe	Leu	Ala	
355				360				365								
Glu	Lys	Gly	Asp	Val	Gln	Ala	Gln	Val	Gly	Leu	Gly	Gln	Leu	His	Leu	
370				375				380								
His	Gly	Gly	Arg	Gly	Val	Glu	Gln	Asn	His	Gln	Arg	Ala	Phe	Asp	Tyr	
385				390				395				400				
Phe	Asn	Leu	Ala	Ala	Asn	Ala	Gly	Asn	Ser	His	Ala	Met	Ala	Phe	Leu	
405				410				415								
Gly	Lys	Met	Tyr	Ser	Glu	Gly	Ser	Asp	Ile	Val	Pro	Gln	Ser	Asn	Glu	
420				425				430								
Thr	Ala	Leu	His	Tyr	Phe	Lys	Lys	Ala	Ala	Asp	Met	Gly	Asn	Pro	Val	
435				440				445								
Gly	Gln	Ser	Gly	Leu	Gly	Met	Ala	Tyr	Leu	Tyr	Gly	Arg	Gly	Val	Gln	
450				455				460								
Val	Asn	Tyr	Asp	Leu	Ala	Leu	Lys	Tyr	Phe	Gln	Lys	Ala	Ala	Glu	Gln	
465				470				475				480				
Gly	Trp	Val	Asp	Gly	Gln	Leu	Gln	Leu	Gly	Ser	Met	Tyr	Tyr	Asn	Gly	
485				490				495								
Ile	Gly	Val	Lys	Arg	Asp	Tyr	Lys	Gln	Ala	Leu	Lys	Tyr	Phe	Asn	Leu	
500				505				510								
Ala	Ser	Gln	Gly	Gly	His	Ile	Leu	Ala	Phe	Tyr	Asn	Leu	Ala	Gln	Met	

515	520	525
His Ala Ser Gly Thr Gly Val Met Arg Ser Cys	His Thr Ala Val Glu	
530	535	540
Leu Phe Lys Asn Val Cys Glu Arg Gly Arg Trp Ser Glu Arg Leu Met		
545	550	555
Thr Ala Tyr Asn Ser Tyr Lys Asp Gly Asp Tyr Asn Ala Ala Val Ile		
565	570	575
Gln Tyr Leu Leu Leu Ala Glu Gln Gly Tyr Glu Val Ala Gln Ser Asn		
580	585	590
Ala Ala Phe Ile Leu Asp Gln Arg Glu Ala Ser Ile Val Gly Glu Asn		
595	600	605
Glu Thr Tyr Pro Arg Ala Leu Leu His Trp Asn Arg Ala Ala Ser Gln		
610	615	620
Gly Tyr Thr Val Ala Arg Ile Lys Leu Gly Asp Tyr His Phe Tyr Gly		
625	630	635
Phe Gly Thr Asp Val Asp Tyr Glu Thr Ala Phe Ile His Tyr Arg Leu		
645	650	655
Ala Ser Glu Gln Gln His Ser Ala Gln Ala Met Phe Asn Leu Gly Tyr		
660	665	670
Met His Glu Lys Gly Leu Gly Ile Lys Gln Asp Ile His Leu Ala Lys		
675	680	685
Arg Phe Tyr Asp Met Ala Ala Glu Ala Ser Pro Asp Ala Gln Val Pro		
690	695	700
Val Phe Leu Ala Leu Cys Lys Leu Gly Val Val Tyr Phe Leu Gln Tyr		
705	710	715
Ile Arg Glu Thr Asn Ile Arg Asp Met Phe Thr Gln Leu Asp Met Asp		
725	730	735
Gln Leu Leu Gly Pro Glu Trp Asp Leu Tyr Leu Met Thr Ile Ile Ala		
740	745	750
Leu Leu Leu Gly Thr Val Ile Ala Tyr Arg Gln Arg Gln His Gln Asp		
755	760	765
Met Pro Ala Pro Arg Pro Pro Gly Pro Arg Pro Ala Pro Pro Gln Gln		
770	775	780
Glu Gly Pro Pro Glu Gln Gln Pro Pro Gln		
785	790	

&lt;210&gt; 2031

&lt;211&gt; 662

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2031

atcatcgaaa gcagcgcccg ccagcaggat tcgattttctc gccaaactgac ccagcagttc  
60  
atcagccaat ggcaggcggc tcacccggcg gatcagatca ccgtgcggtga cgtggcgctg  
120  
aaccctgtgc cgcacctgga cagcatctg ctcggcggtt ggatgaaacc tgccgaacag  
180  
cgcagcgaga tcgaacaggc ttccctggac cgctccaatc aattgaccga cgaattgctc  
240  
gccgccgacg tgctggtgat ggctgcaccg atgtacaact tcgctatccc cagcaccctc  
300  
aaagcctggc tggaccacgt gttgcgtgcc ggtgtgacct tcaagtacac cgccaccggc  
360



ccccagggat tgctgcacgg caagcgcgcg attgtgctga cgcctcgcgg cggcattcat  
 420  
 accggcgcca gctccgatca ccaggaaccg tacctgcgcc aggtcatggc ctttatcggg  
 480  
 attcatgacg tcacgttcat tcatgccgaa ggggtgaact tgagcgggta cttccaggaa  
 540  
 aaaggcctta accacgcca ggcgttgctg gcgcaacttg tggcatgaac cgagtcaacg  
 600  
 gttaatcgtc acataatcgc cgggtgttta tatcgcttca cgcaaaccct tcaagtacgc  
 660  
 gt  
 662

<210> 2032  
 <211> 195  
 <212> PRT  
 <213> Homo sapiens

<400> 2032  
 Ile Ile Glu Ser Ser Ala Arg Gln Gln Asp Ser Ile Ser Arg Gln Leu  
 1 5 10 15  
 Thr Gln Gln Phe Ile Ser Gln Trp Gln Ala Ala His Pro Ala Asp Gln  
 20 25 30  
 Ile Thr Val Arg Asp Val Ala Leu Asn Pro Val Pro His Leu Asp Thr  
 35 40 45  
 His Leu Leu Gly Gly Trp Met Lys Pro Ala Glu Gln Arg Ser Ala Ile  
 50 55 60  
 Glu Gln Ala Ser Leu Asp Arg Ser Asn Gln Leu Thr Asp Glu Leu Leu  
 65 70 75 80  
 Ala Ala Asp Val Leu Val Met Ala Ala Pro Met Tyr Asn Phe Ala Ile  
 85 90 95  
 Pro Ser Thr Leu Lys Ala Trp Leu Asp His Val Leu Arg Ala Gly Val  
 100 105 110  
 Thr Phe Lys Tyr Thr Ala Thr Gly Pro Gln Gly Leu Leu His Gly Lys  
 115 120 125  
 Arg Ala Ile Val Leu Thr Ala Arg Gly Gly Ile His Thr Gly Ala Ser  
 130 135 140  
 Ser Asp His Gln Glu Pro Tyr Leu Arg Gln Val Met Ala Phe Ile Gly  
 145 150 155 160  
 Ile His Asp Val Thr Phe Ile His Ala Glu Gly Val Asn Leu Ser Gly  
 165 170 175  
 Asp Phe Gln Glu Lys Gly Leu Asn His Ala Lys Ala Leu Leu Ala Gln  
 180 185 190  
 Leu Val Ala  
 195

<210> 2033  
 <211> 380  
 <212> DNA  
 <213> Homo sapiens

<400> 2033  
 aaattttaaa acgggtcatca tttaacaggc gaagctgtaa aacgcagtct tgaagaggga  
 60

atgaaaaaaa gtgatttggt aaaaggatca cttcctatca aatcaatcaa cgctcatgga  
 120  
 caaaaagtca caatcaatac taaagaacct tatccagaat taaagtctga actcgcaagc  
 180  
 ccatttgctg ctatatacga caaaaaagct aaaaacaaag taactgatca acctggtggt  
 240  
 acgggtcctt atcaaattga cagttataaa cgttcgcaaa aaatcgtatt aaaacaattc  
 300  
 aaagactact ggcaaggtag gccaaaatta aaaagaatta atgtcactta tcatgaagat  
 360  
 ggtaatantc gtgttgatca  
 380

<210> 2034  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2034  
 Met Lys Lys Ser Asp Leu Leu Lys Gly Ser Leu Pro Ile Lys Ser Ile  
 1 5 10 15  
 Asn Ala His Gly Gln Lys Val Thr Ile Asn Thr Lys Glu Pro Tyr Pro  
 20 25 30  
 Glu Leu Lys Ser Glu Leu Ala Ser Pro Phe Ala Ala Ile Tyr Asp Thr  
 35 40 45  
 Lys Ala Lys Asn Lys Val Thr Asp Gln Pro Val Gly Thr Gly Pro Tyr  
 50 55 60  
 Gln Ile Asp Ser Tyr Lys Arg Ser Gln Lys Ile Val Leu Lys Gln Phe  
 65 70 75 80  
 Lys Asp Tyr Trp Gln Gly Thr Pro Lys Leu Lys Arg Ile Asn Val Thr  
 85 90 95  
 Tyr His Glu Asp Gly Asn Xaa Arg Val Asp  
 100 105

<210> 2035  
 <211> 495  
 <212> DNA  
 <213> Homo sapiens

<400> 2035  
 ngaattcctt tactgcttgc aacacaggcc caagctactc gcagccatga tacttcctgt  
 60  
 cttcacttct ttcattgtatg tatgtatgta tgtatgtatg tatgtatgta tgtatgtatg  
 120  
 tatgctntaa tgttccccctt tcatctcgca tgtctccact tctgctgcta ttgctgttac  
 180  
 ttgtgtgttg gtgcacctaa tgggtgtccca tatttctctg atgctgtggt catttttctt  
 240  
 gattctttct actgtctggt cttcagtttg cataatccat attgttctct ctactagttc  
 300  
 actgggtgctt ttgcctgccg gctctaattt actgttatcc cctttagtga aattttttct  
 360  
 ttttttctct tctcattcca gttattatac agaactattc aacttcaaga tttgtggggg  
 420

tttgttttgt ttgttttga gaccccatct caaaaaaaaa aaaaaccagc tttctcctca  
 480  
 acttggggga acctt  
 495

<210> 2036  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2036  
 Xaa Ile Pro Leu Leu Leu Ala Thr Gln Ala Gln Ala Thr Arg Ser His  
 1 5 10 15  
 Asp Thr Ser Cys Leu His Phe Phe His Val Cys Met Tyr Val Cys Met  
 20 25 30  
 Tyr Val Cys Met Tyr Val Cys Met Tyr Ala Xaa Met Phe Pro Phe His  
 35 40 45  
 Leu Ala Cys Leu His Phe Cys Cys Tyr Cys Cys Tyr Leu Cys Val Gly  
 50 55 60  
 Ala Pro Asn Gly Val Pro Tyr Phe Ser Asp Ala Val Phe Ile Phe Leu  
 65 70 75 80  
 Asp Ser Phe Tyr Cys Leu Val Phe Ser Leu His Asn Pro Tyr Cys Ser  
 85 90 95  
 Leu Tyr

<210> 2037  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

<400> 2037  
 acgcgtgaag ggaaggggga gaccccgga gaaatggaga aatgggggag cacacagagc  
 60  
 ggaagagtga ggttggagt cctttccgc gctcatcttc cgtccccact ccacgccag  
 120  
 caaatccaaa caccgcggcc tctggtggcc cgggcttcca tttccctgg aggggcaagg  
 180  
 gcgtttcttc ttccgcccaa ccggggcgct gaggcgagg aacagcgagg ggggctttgt  
 240  
 ggtcccgagg ggtccgagt tgtgtcaggg gctggggcgg gggatggcg cgccccctgg  
 300  
 gtatccctca cggtcctggt tcatgag  
 327

<210> 2038  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2038  
 Met Glu Lys Trp Gly Arg Thr Gln Thr Gly Arg Val Arg Leu Glu Cys  
 1 5 10 15  
 Leu Ser Arg Ala His Leu Pro Ser Pro Leu His Ala Gln Gln Ile Gln

```

                20                25                30
Thr Pro Arg Pro Leu Val Ala Arg Ala Ser Ile Ser Pro Gly Gly Ala
      35                40                45
Arg Ala Phe Pro Leu Pro Pro Asn Arg Gly Ala Glu Arg Arg Glu Gln
      50                55                60
Arg Arg Gly Leu Cys Gly Pro Gly Gly Ser Glu Cys Val Ser Gly Ala
65                70                75                80
Gly Ala Gly Asp Gly Arg Gly Pro Trp Val Ser Leu Thr Val Leu Val
      85                90                95
His Glu

```

&lt;210&gt; 2039

&lt;211&gt; 307

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2039

```

accggtgac cactctgcga aagcggccgc gagcgaagcg ttcttgggtct tcttcgagat
60
cgcgatgat tgcccgaaa acagcggtt gatgccgtca ttgagaggct ctgggccaac
120
accggtacgg gcatatgcct gggcggcatt cttttggatg ttgcgaagaa aggacgcatt
180
cggcgtgccg aaagccaggg atccttcacc gtagaccttg gaccgatgga ggccccggc
240
aatcgagtcc ttcgaaattc ccccttggca tacatgtcgg ccacgtcgt cageccagagt
300
aacgcgt
307

```

&lt;210&gt; 2040

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2040

```

Met Ala Asp Met Tyr Ala Lys Gly Glu Phe Arg Arg Thr Arg Leu Pro
1                5                10                15
Gly Ala Ser Ile Gly Pro Arg Ser Thr Val Lys Asp Pro Trp Leu Ser
      20                25                30
Ala Arg Arg Met Arg Pro Phe Phe Ala Thr Ser Lys Arg Met Pro Pro
      35                40                45
Arg His Met Pro Val Pro Val Leu Ala Gln Ser Leu Ser Met Thr Ala
50                55                60
Ser Ser Arg Cys Phe Pro Gly Asn Thr Ser Arg Ser Arg Arg Arg Pro
65                70                75                80
Arg Thr Leu Arg Ser Arg Pro Leu Ser Gln Ser Gly Ser Pro
      85                90

```

&lt;210&gt; 2041

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 2041  
 nnccggcgat gcagggattc gcccgcgatg cgctcgaacc cggcgcgggg ggcgttcttc  
 60  
 gccagcttcc tgccgttcgc cagacgcata gccgaggcgg ggggtgcgcaa ttcgctcgcc  
 120  
 cagctggtcg ccaagctgac cctgcccggc atgcccgaca tctaccaggg ctgcgagatg  
 180  
 tgggacctca gcctggtcga ccgggacaat cgccgccccg tcgactacga gacacgcgac  
 240  
 gcggccctgg ccggctgggt cgcgaccccg ccggaggaac gcgcgcggc gctgcgcacc  
 300  
 ctgctgacgg attggcgag cggcgcggtc aagctggccg tgacgcgt  
 348

<210> 2042  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 2042  
 Xaa Arg Arg Cys Arg Asp Ser Pro Ala Met Arg Ser Asn Pro Ala Arg  
 1 5 10 15  
 Gly Ala Phe Leu Ala Ser Phe Leu Pro Phe Ala Arg Arg Ile Ala Glu  
 20 25 30  
 Ala Gly Val Arg Asn Ser Leu Ala Gln Leu Val Ala Lys Leu Thr Leu  
 35 40 45  
 Pro Gly Met Pro Asp Ile Tyr Gln Gly Cys Glu Met Trp Asp Leu Ser  
 50 55 60  
 Leu Val Asp Arg Asp Asn Arg Arg Pro Val Asp Tyr Glu Thr Arg Asp  
 65 70 75 80  
 Ala Ala Leu Ala Gly Trp Val Ala Thr Pro Pro Glu Glu Arg Ala Ala  
 85 90 95  
 Ala Leu Arg Thr Leu Leu Thr Asp Trp Arg Ser Gly Ala Val Lys Leu  
 100 105 110  
 Ala Val Thr Arg  
 115

<210> 2043  
 <211> 712  
 <212> DNA  
 <213> Homo sapiens

<400> 2043  
 gatctgacgg tctcgactaa gcctgaccat tccgaggtca ccgacgcgga ccttgccgtc  
 60  
 gaagattcgg tgccgagagc cctgtctcga atgcgctccc gggatgccgt ccacggcgag  
 120  
 gaacgtgccg ataccgggga tggaccccg cggaggatca ttgatccgat cgacggcact  
 180  
 gcgaattttc tgcgtggggg cccagtgtgg gccacctca ttgccctcag cgtcgaggag  
 240  
 cagattgtcg catctgtggt ctctgctcct gccctcaagc gacgctggtg ggcagcccgt  
 300

ggctcaggag catggtcggg caaatccctg gctcagcga caccgatcca cgtctcgaat  
 360  
 gtgcgcaatc ttgccgacgc attcttgtcc tactcttcgc tgcacggatg ggtcgagagc  
 420  
 ggacgagggc acgggttcgg tgaactcatg cggtcggtgt ggcggaacccg agccttcggc  
 480  
 gatttctggt cttacatgat ggtggcagaa ggtgtcgtcg atgtggcatg cgagccggaa  
 540  
 ctcagcctgc acgacatggc cgccctcgac gctatcgtca ccgaggcggg cggttaagttc  
 600  
 accggtctcg atggcaaaga cggcccgtgg tctgggaatg ctctggcgtc gaatggtttc  
 660  
 cttcatgacc aggcctagc catggtcag cctcaggagt gagcacgat cg  
 712

&lt;210&gt; 2044

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2044

Asp	Leu	Thr	Val	Ser	Thr	Lys	Pro	Asp	His	Ser	Glu	Val	Thr	Asp	Ala
1				5				10						15	
Asp	Leu	Ala	Val	Glu	Asp	Ser	Val	Arg	Arg	Ala	Leu	Ser	Arg	Met	Arg
		20						25					30		
Ser	Arg	Asp	Ala	Val	His	Gly	Glu	Glu	Arg	Ala	Asp	Thr	Gly	Asp	Gly
		35				40					45				
Pro	Arg	Arg	Trp	Ile	Ile	Asp	Pro	Ile	Asp	Gly	Thr	Ala	Asn	Phe	Leu
	50					55				60					
Arg	Gly	Val	Pro	Val	Trp	Ala	Thr	Leu	Ile	Ala	Leu	Ser	Val	Glu	Asp
65				70				75						80	
Gln	Ile	Val	Ala	Ser	Val	Val	Ser	Ala	Pro	Ala	Leu	Lys	Arg	Arg	Trp
			85					90					95		
Trp	Ala	Ala	Arg	Gly	Ser	Gly	Ala	Trp	Ser	Gly	Lys	Ser	Leu	Ala	Ser
		100					105						110		
Ala	Thr	Pro	Ile	His	Val	Ser	Asn	Val	Arg	Asn	Leu	Ala	Asp	Ala	Phe
		115					120					125			
Leu	Ser	Tyr	Ser	Ser	Leu	His	Gly	Trp	Val	Glu	Ser	Gly	Arg	Gly	His
	130					135				140					
Gly	Phe	Gly	Glu	Leu	Met	Arg	Ser	Val	Trp	Arg	Thr	Arg	Ala	Phe	Gly
145				150				155						160	
Asp	Phe	Trp	Ser	Tyr	Met	Met	Val	Ala	Glu	Gly	Val	Val	Asp	Val	Ala
			165					170					175		
Cys	Glu	Pro	Glu	Leu	Ser	Leu	His	Asp	Met	Ala	Ala	Leu	Asp	Ala	Ile
		180					185						190		
Val	Thr	Glu	Ala	Gly	Gly	Lys	Phe	Thr	Gly	Leu	Asp	Gly	Lys	Asp	Gly
		195				200						205			
Pro	Trp	Ser	Gly	Asn	Ala	Leu	Ala	Ser	Asn	Gly	Phe	Leu	His	Asp	Gln
	210				215					220					
Ala	Leu	Ala	Met	Val	Gln	Pro	Gln	Glu							
225					230										

&lt;210&gt; 2045

&lt;211&gt; 406

<212> DNA  
<213> Homo sapiens

<400> 2045  
nnttggacac cggcgactat gccgccaccg cacggatcaa tcgcggaccc agggcagggg  
60  
atgcgccgga tggggcagcg tgatggaccg ggcgctggac ctgggcggtc gcttcgacga  
120  
cantacaggc tttggccgag gcgggttga agaaaccggc caaccgggtg tttggccccg  
180  
catcaatgcc cagaaccaga agccttgccg attcgtccca ggccgttcaa ggccgatggc  
240  
gagatcgtcg cgtgactgg cgacgggtgc aacgacgccc cctcgtctaa ggcggcccat  
300  
atcgggtgtcg ccatggacaa acgcggcacc gacgtcgcgc gcgaggcttc cgccatggtc  
360  
ctgctcgagg atgattttgg atcgatcgtg cagtcgggtcc ggctcg  
406

<210> 2046  
<211> 135  
<212> PRT  
<213> Homo sapiens

<400> 2046  
Xaa Trp Thr Pro Ala Thr Met Pro Pro Pro His Gly Ser Ile Ala Asp  
1 5 10 15  
Pro Gly Gln Gly Met Arg Arg Met Gly Asp Gly Asp Gly Pro Gly Ala  
20 25 30  
Gly Pro Gly Arg Ser Leu Arg Arg Xaa Tyr Arg Leu Trp Pro Arg Arg  
35 40 45  
Val Gly Arg Asn Arg Ser Thr Gly Gly Leu Ala Pro His Gln Cys Pro  
50 55 60  
Glu Pro Glu Ala Leu Arg Ile Arg Pro Arg Pro Phe Lys Ala Asp Gly  
65 70 75 80  
Glu Ile Val Ala Met Thr Gly Asp Gly Val Asn Asp Ala Pro Ser Leu  
85 90 95  
Lys Ala Ala His Ile Gly Val Ala Met Asp Lys Arg Gly Thr Asp Val  
100 105 110  
Ala Arg Glu Ala Ser Ala Met Val Leu Leu Glu Asp Asp Phe Gly Ser  
115 120 125  
Ile Val Gln Ser Val Arg Leu  
130 135

<210> 2047  
<211> 796  
<212> DNA  
<213> Homo sapiens

<400> 2047  
aagctttgga acgagacccc tgagctctgg gttcagcccc gaggaagccc agcaacagga  
60  
tgaggaattt gagaagaaga ttccaagtgt ggaagacagc cttggagagg gcagcagggg  
120

tgctggccgg ccaggagaga gaggatccgg gggcttgttc agtcctagca ctgcccacgt  
 180  
 gccggatggg gcactcgggc agagagacca gagcagctgg caaaacagtg atgctagcca  
 240  
 ggaggtggga gggcatcagg agagacagca ggcaggggct cagggccctg gcagtgtga  
 300  
 cctggaagat ggggagatgg gaaagcgagg ctgggtcggg gagtttagcc tcagtgttgg  
 360  
 cccccagcga gaggcagcat ttagcccagg gcagcaggac tggagccggg acttctgcat  
 420  
 cgaggccagt gagaggagct atcagtttgg catcattggc aacgacagag tgagtgggtg  
 480  
 tggcttttagc ccttctagca agatggaagg tggtcacttt gtgcctcctg ggaagaccac  
 540  
 agctggctcg gtggactgga ctgaccagct gggctctcagg aacttggaag tgtccagctg  
 600  
 tgtgggttct gggggctcga gcgagggcag ggagagtgcc gtgggacaga tgggctgggc  
 660  
 aggtggcctg agcttgagag acatgaacct gaccggctgt ttggaaagtg gagggctctga  
 720  
 agagccgggg ggaatcggaa ttggggagaa ggactggact tctgatgtta atgtgaagag  
 780  
 caaagatttg gctgag  
 796

<210> 2048

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2048

Met	Gly	Lys	Arg	Gly	Trp	Val	Gly	Glu	Phe	Ser	Leu	Ser	Val	Gly	Pro
1				5					10					15	
Gln	Arg	Glu	Ala	Phe	Ser	Pro	Gly	Gln	Gln	Asp	Trp	Ser	Arg	Asp	
			20				25						30		
Phe	Cys	Ile	Glu	Ala	Ser	Glu	Arg	Ser	Tyr	Gln	Phe	Gly	Ile	Ile	Gly
		35				40						45			
Asn	Asp	Arg	Val	Ser	Gly	Ala	Gly	Phe	Ser	Pro	Ser	Ser	Lys	Met	Glu
	50				55					60					
Gly	Gly	His	Phe	Val	Pro	Pro	Gly	Lys	Thr	Thr	Ala	Gly	Ser	Val	Asp
65				70					75					80	
Trp	Thr	Asp	Gln	Leu	Gly	Leu	Arg	Asn	Leu	Glu	Val	Ser	Ser	Cys	Val
			85					90						95	
Gly	Ser	Gly	Gly	Ser	Ser	Glu	Ala	Arg	Glu	Ser	Ala	Val	Gly	Gln	Met
			100				105						110		
Gly	Trp	Ser	Gly	Gly	Leu	Ser	Leu	Arg	Asp	Met	Asn	Leu	Thr	Gly	Cys
		115					120					125			
Leu	Glu	Ser	Gly	Gly	Ser	Glu	Glu	Pro	Gly	Gly	Ile	Gly	Ile	Gly	Glu
	130					135					140				
Lys	Asp	Trp	Thr	Ser	Asp	Val	Asn	Val	Lys	Ser	Lys	Asp	Leu	Ala	Glu
145					150					155					160

<210> 2049

<211> 516



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2049

cgcgctcgctt acggtgcgct gaataccagc ctgctggcgc tggcggtcag cttcgcgctcg  
 60  
 ctgttcctcg ggatagtgtt cgggctgatg ccacgtctga tgtgcggggg gattgaactg  
 120  
 gccaacgctc ccccgccaat cgccttgggc ctgttagtag tcgccattag cggcccttca  
 180  
 gcctacggtg ccgcctgtgc ggtgatgttg gtcagttggg ctccgctggc cgcccattgt  
 240  
 gcttcgttgt tggcggaagc ccgcacgcag ccctatatcc gcatgttgcc ggtattgggc  
 300  
 gtcggccgat ggcgcacgct gaccactac ctgctgccgg cgctctctgc tccctgctg  
 360  
 cgccacgcca tgttgctct gccgggcatt gcgctggcgc tggcggcctt gggttttttt  
 420  
 ggtcttgggc cgcagccacc cagtgcagaa tgggggctgg tgctggcgga aggcattgct  
 480  
 tatctcgaac gggcgccctg gggagtctg gcaccg  
 516

&lt;210&gt; 2050

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2050

Arg	Val	Ala	Tyr	Gly	Ala	Leu	Asn	Thr	Ser	Leu	Leu	Ala	Leu	Ala	Val
1				5					10					15	
Ser	Phe	Ala	Ser	Leu	Phe	Leu	Gly	Ile	Val	Phe	Gly	Leu	Met	Pro	Arg
			20				25						30		
Leu	Met	Cys	Gly	Val	Ile	Glu	Leu	Ala	Asn	Ala	Pro	Pro	Pro	Ile	Ala
		35					40					45			
Leu	Gly	Leu	Leu	Val	Val	Ala	Ile	Ser	Gly	Pro	Ser	Ala	Tyr	Gly	Ala
	50					55					60				
Ala	Cys	Ala	Val	Met	Leu	Val	Ser	Trp	Ala	Pro	Leu	Ala	Ala	His	Cys
65					70					75				80	
Ala	Ser	Leu	Leu	Ala	Glu	Ala	Arg	Thr	Gln	Pro	Tyr	Ile	Arg	Met	Leu
			85						90					95	
Pro	Val	Leu	Gly	Val	Gly	Arg	Trp	Arg	Thr	Leu	Thr	His	Tyr	Leu	Leu
			100					105					110		
Pro	Ala	Leu	Ser	Ala	Pro	Leu	Leu	Arg	His	Ala	Met	Leu	Arg	Leu	Pro
		115				120					125				
Gly	Ile	Ala	Leu	Ala	Leu	Ala	Ala	Leu	Gly	Phe	Phe	Gly	Leu	Gly	Pro
	130					135					140				
Gln	Pro	Pro	Ser	Ala	Glu	Trp	Gly	Leu	Val	Leu	Ala	Glu	Gly	Met	Pro
145					150					155				160	
Tyr	Leu	Glu	Arg	Ala	Pro	Trp	Gly	Val	Leu	Ala	Pro				
				165						170					

&lt;210&gt; 2051

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2051

gagcaaaact atcgttctac cggcaatatt ctgaaaagtg ccaaccaact tatttcgaat  
 60  
 aatagtgtatc gtctcggtaa gaatttatgg accgacggtg aaatggggga gccagtaggt  
 120  
 atttatgcag catttaatga attagatgag gcaaaatttg tggcgtctca aatccaaaat  
 180  
 tgggtagatg atggtgggga attagatgat tgtgctgttt tatatcgtag taatagccaa  
 240  
 tctcgtgtta ttgaagaagc cttgattcgt tgccaaattc cttatcgaat ttatggcggg  
 300  
 atgctgattct tcgaacgcca agaaattaaa gatgcgttgg catatttacg ttttaattaat  
 360  
 aatcgtcaag atgatgccgc atttgagcgt gtgattaata cgcctacgcg t  
 411

&lt;210&gt; 2052

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2052

Glu	Gln	Asn	Tyr	Arg	Ser	Thr	Gly	Asn	Ile	Leu	Lys	Ser	Ala	Asn	Gln
1				5				10						15	
Leu	Ile	Ser	Asn	Asn	Ser	Asp	Arg	Leu	Gly	Lys	Asn	Leu	Trp	Thr	Asp
		20					25					30			
Gly	Glu	Met	Gly	Glu	Pro	Val	Gly	Ile	Tyr	Ala	Ala	Phe	Asn	Glu	Leu
	35					40						45			
Asp	Glu	Ala	Lys	Phe	Val	Ala	Ser	Gln	Ile	Gln	Asn	Trp	Val	Asp	Asp
	50				55					60					
Gly	Gly	Glu	Leu	Asp	Asp	Cys	Ala	Val	Leu	Tyr	Arg	Ser	Asn	Ser	Gln
65				70					75					80	
Ser	Arg	Val	Ile	Glu	Glu	Ala	Leu	Ile	Arg	Cys	Gln	Ile	Pro	Tyr	Arg
			85					90						95	
Ile	Tyr	Gly	Gly	Met	Arg	Phe	Phe	Glu	Arg	Gln	Glu	Ile	Lys	Asp	Ala
		100						105					110		
Leu	Ala	Tyr	Leu	Arg	Leu	Ile	Asn	Asn	Arg	Gln	Asp	Asp	Ala	Ala	Phe
		115				120						125			
Glu	Arg	Val	Ile	Asn	Thr	Pro	Thr	Arg							
	130						135								

&lt;210&gt; 2053

&lt;211&gt; 287

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2053

ncctatggaag ccttcaatct tgtaagagaa agtgaacagc tgttttccat atgccaaatc  
 60  
 ccgtcctct gctggatcct gtgtaccagt ctgaagcaag agatgcagaa aggaaaaagac  
 120

ctggccctga cctgccagag cactacctct gtgtactcct ctttcgtctt taacctgttc  
 180  
 acacctgagg gtgccgaggg cccgactccg caaaccagc accagctgaa ggccctgtgc  
 240  
 tccttggtcg cagagggat gtggacagac acatttgagt tttgtga  
 287

<210> 2054  
 <211> 79  
 <212> PRT  
 <213> Homo sapiens

<400> 2054  
 Ile Cys Gln Ile Pro Leu Leu Cys Trp Ile Leu Cys Thr Ser Leu Lys  
 1 5 10 15  
 Gln Glu Met Gln Lys Gly Lys Asp Leu Ala Leu Thr Cys Gln Ser Thr  
 20 25 30  
 Thr Ser Val Tyr Ser Ser Phe Val Phe Asn Leu Phe Thr Pro Glu Gly  
 35 40 45  
 Ala Glu Gly Pro Thr Pro Gln Thr Gln His Gln Leu Lys Ala Leu Cys  
 50 55 60  
 Ser Leu Ala Ala Glu Gly Met Trp Thr Asp Thr Phe Glu Phe Cys  
 65 70 75

<210> 2055  
 <211> 298  
 <212> DNA  
 <213> Homo sapiens

<400> 2055  
 nnacgcgttg ttatgaacaa tgacggtgtc ctctaccccg atacctgcgt gggactgat  
 60  
 tcccacacca ccatggaaaa tggctcttggc attctgggct ggggcgtcgg tggattgaa  
 120  
 gccgaggctg ctatgcttgg ccagcccatc tccatgctta tccccgtgt tgttggtttt  
 180  
 aaacttactg gccaaacaca gccgggtgtc accgctacag atgttgttct taccattact  
 240  
 gatatgcttc gccagcatgg tgtgggtgga aaattcgggg aattctatgg gggaagcg  
 298

<210> 2056  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 2056  
 Xaa Arg Val Val Met Asn Asn Asp Gly Val Leu Tyr Pro Asp Thr Cys  
 1 5 10 15  
 Val Gly Thr Asp Ser His Thr Thr Met Glu Asn Gly Leu Gly Ile Leu  
 20 25 30  
 Gly Trp Gly Val Gly Gly Ile Glu Ala Glu Ala Ala Met Leu Gly Gln  
 35 40 45  
 Pro Ile Ser Met Leu Ile Pro Arg Val Val Gly Phe Lys Leu Thr Gly

50                      55                      60  
 Gln Thr Gln Pro Gly Val Thr Ala Thr Asp Val Val Leu Thr Ile Thr  
 65                      70                      75                      80  
 Asp Met Leu Arg Gln His Gly Val Gly Gly Lys Phe Gly Glu Phe Tyr  
                     85                      90                      95  
 Gly Gly Ser

<210> 2057

<211> 569

<212> DNA

<213> Homo sapiens

<400> 2057

acgcgtcccg acagtaccga ctataacgga ggaaactatc aggaacggta taaaatttta  
 60  
 gcagaaattc gtaaggctct tgaagacgga gatcgccaaa aagccaaacg attagctgaa  
 120  
 caaaatctag ttggacaaaa caacgcccag tatggtcggt atctagcctt tggatgatc  
 180  
 ttcatgggtct tcaataacca gaaaaagggg ctggatacag ttacagacta tcaccgtggt  
 240  
 ttggatatca cagaagccac tactacaact tcttacaccc aagatggaac gacctttaa  
 300  
 agagaaacct tctcaagtta ccctgatgat gttactgtta ctacttgac caaaaaggg  
 360  
 gacaaaaaac ttgattttac agtttggaaat agcttaacag aagatttact tgctaacgga  
 420  
 gactactcag cggaatattc taactacaag agtggccatg ttacgacaga ccaaagtgt  
 480  
 atcctactaa aaggtacagt caaagataat ggcctccagt tcgcatccta tctaggaatt  
 540  
 aaaacggacg gaaaagtac tgttcatga  
 569

<210> 2058

<211> 128

<212> PRT

<213> Homo sapiens

<400> 2058

Met Val Phe Asn Asn Gln Lys Lys Gly Leu Asp Thr Val Thr Asp Tyr  
 1                      5                      10                      15  
 His Arg Gly Leu Asp Ile Thr Glu Ala Thr Thr Thr Thr Ser Tyr Thr  
                     20                      25                      30  
 Gln Asp Gly Thr Thr Phe Lys Arg Glu Thr Phe Ser Ser Tyr Pro Asp  
                     35                      40                      45  
 Asp Val Thr Val Thr His Leu Thr Gln Lys Gly Asp Lys Lys Leu Asp  
                     50                      55                      60  
 Phe Thr Val Trp Asn Ser Leu Thr Glu Asp Leu Leu Ala Asn Gly Asp  
 65                      70                      75                      80  
 Tyr Ser Ala Glu Tyr Ser Asn Tyr Lys Ser Gly His Val Thr Thr Asp  
                     85                      90                      95  
 Pro Asn Gly Ile Leu Leu Lys Gly Thr Val Lys Asp Asn Gly Leu Gln

100                      105                      110  
 Phe Ala Ser Tyr Leu Gly Ile Lys Thr Asp Gly Lys Val Thr Val His  
 115                      120                      125

<210> 2059

<211> 644

<212> DNA

<213> Homo sapiens

<400> 2059

gaattcgtgc caccgtgcc atacttcgcc acgcaacaga gtgccgtcag cggattgggc  
 60  
 agcaatcgac ctgtaggact cagccatgat cgactgggca tctctgtata gtcgcatgc  
 120  
 cgcaaccgcc tgcgcttcca agcctgcagc gacgtaagag gccctctcac aactgaacc  
 180  
 gatcgctcca gacaacgtgg aagcgataac ctgcgctcgc ttctgctgat tctgggcca  
 240  
 gctcgacaag aagaaccgca gagggcgac ggcttggtca gggagcgac cttcagcgtt  
 300  
 cgtcttggtc tccgggacag caaaaagcgg ggaatcagcc aggccacgct cgcgtcatgag  
 360  
 tcggccgagg tccgccggtta cctctctcat ggcttcaca ggaacgcggt cacacaccac  
 420  
 cgcgatcgac gcgtgcctct cttgagcctc gttgaggaaa tcccacggca cagcgtcagc  
 480  
 gtagcgggct gctgagggtga caaagatcca cagatccgag gcctggagca actgagccgc  
 540  
 cagatcacga ttgcgggtca ccacagagtc gatgtccggg gcatcgagga tggccaaacc  
 600  
 tcgcggaatc cttgactccg cgacgagctg caaactcgac gcgt  
 644

<210> 2060

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2060

Met Arg Glu Val Pro Ala Asp Leu Gly Arg Leu Met Thr Glu Arg Gly  
 1                      5                      10                      15  
 Leu Ala Asp Ser Pro Leu Phe Ala Val Pro Glu Thr Lys Thr Asn Ala  
 20                      25                      30  
 Glu Gly Ala Leu Pro Asp Gln Ala Val Ala Pro Leu Arg Phe Phe Leu  
 35                      40                      45  
 Ser Ser Leu Ala Gln Asn Gln Gln Lys Arg Arg Glu Val Ile Ala Ser  
 50                      55                      60  
 Thr Leu Ser Gly Ala Ile Gly Ser Val Cys Glu Arg Ala Ser Tyr Val  
 65                      70                      75                      80  
 Ala Ala Gly Leu Glu Ala Gln Ala Val Ala Ser Arg Leu Tyr Glu  
 85                      90                      95  
 Asp Ala Gln Ser Ile Met Ala Glu Ser Tyr Arg Ser Ile Ala Ala Gln  
 100                      105                      110  
 Ser Ala Asp Gly Thr Leu Leu Arg Gly Glu Val Leu Ala Arg Trp His

115 120 125

Glu Phe  
130

<210> 2061  
<211> 481  
<212> DNA  
<213> Homo sapiens

<400> 2061  
gttaacctgg taaggagagc gacacaggaa ggtgcagggg ttgccatggt gtggccccag  
60  
atgctgtgat tacgcgccag ccccgtcaca ccgtacgggt ggtaggactg ggcaaagaag  
120  
acgccgccac ctggatgcac tgagggtgtgc acagccacgt ggagatgatg ctgggggctc  
180  
acggtgactc tcaggaggcc ctggcctggc ctatctggag ccttctctgt gaaatgagge  
240  
tggtaacgcc cactagcagg gttgtagggg acatggatct gtggccacct cctcaagggt  
300  
tgccacacgc accaggtcct gactgggagt ccggcccccga gggcctgtgg atggctggcc  
360  
tgggcccgag ctccgcccc aagggtgctg gcacctggca tgtgcccga agttggggcc  
420  
ggctggtggg aagggtgtgtg tcagggtggc gagcctcggt gccaggatct cactcacgga  
480  
t  
481

<210> 2062  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 2062  
Met Pro Gly Ala Ser Thr Leu Gly Gly Gly Gly Trp Ala Gln Ala Ser  
1 5 10 15  
His Pro Gln Ala Leu Gly Ala Gly Leu Pro Val Arg Thr Trp Cys Val  
20 25 30  
Trp Gln Pro Leu Arg Arg Trp Pro Gln Ile His Val Pro Tyr Asn Pro  
35 40 45  
Ala Ser Gly Arg Tyr Gln Pro His Phe Thr Glu Lys Ala Pro Asp Arg  
50 55 60  
Pro Gly Gln Gly Leu Leu Arg Val Thr Val Ser Pro Gln His His Leu  
65 70 75 80  
His Val Ala Val His Thr Ser Val His Pro Gly Gly Gly Val Phe Phe  
85 90 95  
Ala Gln Ser Tyr His Pro Tyr Gly Val Thr Gly Leu Ala Arg Asn His  
100 105 110  
Ser Ile Trp Gly His Thr Met Ala Thr Pro Ala Pro Ser Cys Val Ala  
115 120 125  
Leu Leu Thr Arg Leu  
130

<210> 2063  
 <211> 419  
 <212> DNA  
 <213> Homo sapiens

<400> 2063  
 gccggcgccg tcgagcgcggt gcctttcaat atcgaggccc aagacatggt gctgctcatc  
 60  
 gcggacacca atgccccgca catgctttcc gacggccaat acgcctcccg ccggggcatc  
 120  
 atcgagcccg tccaatctgc cgccggttgc tccatccgcg agatctcgaa tgcggtggac  
 180  
 tttgcgcgca ccgtcaatcc cgccgaggcg gaactctatc gccgcgcggt gcaccacgtg  
 240  
 gtggaagaaa ccaaccggac cctagatgcc gctaccgcg tggtcatcttc cgatctagat  
 300  
 acattccggc ggcttatgcy cgagagccac atctccctgc gcgaccttta tgaggtcacc  
 360  
 actccggagc tcgactccgt ttttaccgcy gccggcgagc tgggcgctcg catgannnn  
 419

<210> 2064  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2064  
 Ala Gly Ala Val Glu Arg Val Pro Phe Asn Ile Glu Ala Gln Asp Met  
 1 5 10 15  
 Val Leu Leu Ile Ala Asp Thr Asn Ala Pro His Met Leu Ser Asp Gly  
 20 25 30  
 Gln Tyr Ala Ser Arg Arg Gly Ile Ile Asp Ala Val Gln Ser Ala Ala  
 35 40 45  
 Gly Cys Ser Ile Arg Glu Ile Ser Asn Ala Val Asp Phe Ala Ala Thr  
 50 55 60  
 Val Asn Pro Ala Glu Ala Glu Leu Tyr Arg Arg Arg Val His His Val  
 65 70 75 80  
 Val Glu Glu Thr Asn Arg Thr Leu Asp Ala Ala Thr Ala Leu Ala Ser  
 85 90 95  
 Ser Asp Leu Asp Thr Phe Arg Arg Leu Met Arg Glu Ser His Ile Ser  
 100 105 110  
 Leu Arg Asp Leu Tyr Glu Val Thr Thr Pro Glu Leu Asp Ser Val Phe  
 115 120 125  
 Thr Ala Ala Gly Glu Leu Gly Ala Arg Met Xaa  
 130 135

<210> 2065  
 <211> 598  
 <212> DNA  
 <213> Homo sapiens

<400> 2065  
 gccggcgcta tggcctctct gctcgccgac gccgcgatg cccttcccg cgcaaagggtg  
 60

cgcgcgaccg ttactggatc ggcgggattg ggaaccgcag aggcattggg ccttactttc  
 120  
 attcaggagg tcatagctga gacggccgcc gtccaacgtt ggaatcccga cgccgacgtg  
 180  
 cttctcgaac tcggtggtga ggatgccaag atcacctacc ttaagccggt ccccgaacag  
 240  
 cgcataaatg gttcgtgtgc tggtagcacc ggtgccttca tcgaccagat ggctaccctg  
 300  
 ctgcacaccg acactcccgg cctcaatgac ctgcacatccc gagccaagac catccatccg  
 360  
 atcgccctgc gctgtggtgt ttttgccaag tccgaccttc agccccctcat taacgagggg  
 420  
 gcccgcacag aggatctggc tgccctcggtc ctgcaggtcg tcgccactca gtgcattgcc  
 480  
 ggcctggcat gtggtcgccc gattcgaggt aaggatcatc tccttggcgg tccgcttcac  
 540  
 tttatgcaa gtttgcgaga cgctttctcg cgcgtcctcg acggttaagg tgacgcgt  
 598

<210> 2066

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2066

Ala	Gly	Ala	Met	Ala	Ser	Leu	Leu	Ala	Asp	Ala	Ala	Asp	Ala	Leu	Pro
1			5					10						15	
Gly	Ala	Lys	Val	Arg	Ala	Thr	Val	Thr	Gly	Ser	Ala	Gly	Leu	Gly	Thr
			20					25					30		
Ala	Glu	Ala	Leu	Gly	Leu	Thr	Phe	Ile	Gln	Glu	Val	Ile	Ala	Glu	Thr
			35				40						45		
Ala	Ala	Val	Gln	Arg	Trp	Asn	Pro	Asp	Ala	Asp	Val	Leu	Leu	Glu	Leu
			50			55					60				
Gly	Gly	Glu	Asp	Ala	Lys	Ile	Thr	Tyr	Leu	Lys	Pro	Val	Pro	Glu	Gln
65					70					75				80	
Arg	Met	Asn	Gly	Ser	Cys	Ala	Gly	Gly	Thr	Gly	Ala	Phe	Ile	Asp	Gln
					85				90					95	
Met	Ala	Thr	Leu	Leu	His	Thr	Asp	Thr	Pro	Gly	Leu	Asn	Asp	Leu	Ala
			100					105					110		
Ser	Arg	Ala	Lys	Thr	Ile	His	Pro	Ile	Ala	Ser	Arg	Cys	Gly	Val	Phe
			115				120					125			
Ala	Lys	Ser	Asp	Leu	Gln	Pro	Leu	Ile	Asn	Glu	Gly	Ala	Arg	His	Glu
			130			135					140				
Asp	Leu	Ala	Ala	Ser	Val	Leu	Gln	Ala	Val	Ala	Thr	Gln	Cys	Ile	Ala
145					150					155				160	
Gly	Leu	Ala	Cys	Gly	Arg	Pro	Ile	Arg	Gly	Lys	Val	Ile	Phe	Leu	Gly
					165				170					175	
Gly	Pro	Leu	His	Phe	Met	Pro	Ser	Leu	Arg	Asp	Ala	Phe	Ser	Arg	Val
			180					185					190		
Leu	Asp	Gly	Lys	Val	Asp	Ala									
			195												

<210> 2067

<211> 366



<212> DNA  
<213> Homo sapiens

<400> 2067  
ttccagcaga tgctgcaaac ctggacccgc agcggcacgc tgcaggagggc cgtggccaac  
60  
aagatcgccg aatggctgga tgccgacctg caacagtggg acatttcccg cgatgcaccg  
120  
tacttcgggtt tcgagatccc gggcgagcca ggcaagtatt tctacgtgtg gctggacgcg  
180  
ccgacgggt acatggccag ttccaagaac ctgtgcgacc gcacgccgga gctggacttc  
240  
gatgctttct gggccaagga ctccaccgcc gagctgtacc atttcacgga caaggacatc  
300  
gtcaacttcc acgccctgtt ctggccggcg atgctcgaag gctcgggcta ccgtaaaccg  
360  
accggt  
366

<210> 2068  
<211> 122  
<212> PRT  
<213> Homo sapiens

<400> 2068  
Phe Gln Gln Met Leu Gln Thr Trp Thr Arg Ser Gly Thr Leu Gln Glu  
1 5 10 15  
Ala Val Ala Asn Lys Ile Ala Glu Trp Leu Asp Ala Asp Leu Gln Gln  
20 25 30  
Trp Asp Ile Ser Arg Asp Ala Pro Tyr Phe Gly Phe Glu Ile Pro Gly  
35 40 45  
Glu Pro Gly Lys Tyr Phe Tyr Val Trp Leu Asp Ala Pro Ile Gly Tyr  
50 55 60  
Met Ala Ser Phe Lys Asn Leu Cys Asp Arg Thr Pro Glu Leu Asp Phe  
65 70 75 80  
Asp Ala Phe Trp Ala Lys Asp Ser Thr Ala Glu Leu Tyr His Phe Ile  
85 90 95  
Gly Lys Asp Ile Val Asn Phe His Ala Leu Phe Trp Pro Ala Met Leu  
100 105 110  
Glu Gly Ser Gly Tyr Arg Lys Pro Thr Gly  
115 120

<210> 2069  
<211> 280  
<212> DNA  
<213> Homo sapiens

<400> 2069  
cctagagagg atgggtggaga ctgtgcgtgt gcagggtgtt ccggaacctt ccctgggatg  
60  
catggggcct cgccgcaggc catctctcca gacctgggct caccctgccc ctgtgctgtt  
120  
gcctttggct ggaattccac ccagaccttc ttgcctcaag aacgcccttc ccccttcaga  
180

tctcatgggc acaggcccccg tcttcctaaa cggggtcaga gccccagta atcatgacaa  
 240  
 agaccctctc ctgatcaag ctttgggtcaa gctcctaccc  
 280

<210> 2070  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 2070  
 Met Val Glu Thr Val Arg Val Gln Gly Val Pro Glu Pro Ser Leu Gly  
 1 5 10 15  
 Cys Met Gly Pro Arg Arg Arg Pro Ser Leu Gln Thr Trp Ala His Pro  
 20 25 30  
 Ala Pro Val Leu Leu Pro Leu Ala Gly Ile Pro Pro Gln Pro Ser Cys  
 35 40 45  
 Leu Lys Asn Ala Leu Pro Pro Ser Asp Leu Met Gly Thr Gly Pro Val  
 50 55 60  
 Phe Leu Asn Gly Val Arg Ala Pro Ser Asn His Asp Lys Asp Pro Leu  
 65 70 75 80  
 Leu Asp Gln Ala Leu Val Lys Leu Leu Pro  
 85 90

<210> 2071  
 <211> 399  
 <212> DNA  
 <213> Homo sapiens

<400> 2071  
 acgcgtgtcc agcagactta gaaagcaggt tcctcttgtc atacagcacg ttaacatagc  
 60  
 tgacgaggcc tgggtgtctt catcagtact gtgatgactc ttccaccttt gacttcagat  
 120  
 gctggcgctt tttacttttt gtgccaaact ctacacatga aacacttttg gaataactac  
 180  
 agacatgact ttctttatct ggggaaaagg agggcattaa accagattag gggctgggag  
 240  
 gggagggttg caggggatga gctgctcctg aggaagaggc agagatcaag cttcactcag  
 300  
 cagctggatt ctcacctagt ttatagactg aaatcctgca aggtggttac aacagtgaac  
 360  
 aatatgttca tacataaaga ctctaccctc aggtgatca  
 399

<210> 2072  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2072  
 Met Thr Leu Ser Pro Leu Thr Ser Asp Ala Gly Ala Phe Tyr Phe Leu  
 1 5 10 15  
 Cys Gln Thr Leu His Met Lys His Phe Trp Asn Asn Tyr Arg His Asp

```

      20      25      30
Phe Leu Tyr Leu Gly Lys Arg Arg Ala Leu Asn Gln Ile Arg Gly Trp
      35      40      45
Glu Gly Arg Leu Ser Gly Asp Glu Leu Leu Leu Arg Lys Arg Gln Arg
      50      55      60
Ser Ser Phe Thr Gln Gln Leu Asp Ser His Leu Val Tyr Arg Leu Lys
65      70      75      80
Ser Cys Lys Val Val Thr Thr Val Asn Asn Met Phe Ile His Lys Asp
      85      90      95
Ser Thr Leu Arg
      100

```

&lt;210&gt; 2073

&lt;211&gt; 339

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2073

```

ggatccactt ctgtgccttt ccagcttcta gaggtgcct gcgttccttg gctcgtggcc
60
ccttcctcca ccttcaagcc agcagcggag gcctgagtc ttctcatgcc atctctctgt
120
tctctctcct gcctcctcct ccacactgaa ggacccctgt gatcacactg gccccccac
180
cggatgaccc aggataatcc atctccctgt ttgaaggctg gctgattagc aaccttcatt
240
ccatctgcct ccttcattcc ccctggccat gtaatgggat tcacagcttc tggggattag
300
gacatggaca tcttgtggcg ggggcataat tctgtcgac
339

```

&lt;210&gt; 2074

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2074

```

Met Lys Glu Ala Asp Gly Met Lys Val Ala Asn Gln Pro Thr Phe Lys
1      5      10      15
Gln Gly Asp Gly Leu Ser Trp Val Ile Arg Trp Gly Gly Gln Cys Asp
      20      25      30
His Arg Gly Pro Ser Val Trp Arg Arg Arg Gln Glu Arg Glu Gln Arg
      35      40      45
Asp Gly Met Arg Arg Thr Gln Ala Ser Ala Ala Gly Leu Lys Val Glu
      50      55      60
Glu Gly Ala Thr Ser Gln Gly Thr Gln Ala Ala Ser Arg Ser Trp Lys
65      70      75      80
Gly Thr Glu Val Asp
      85

```

&lt;210&gt; 2075

&lt;211&gt; 481

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2075

ntggccaggt tgacctcaaa ggtgtacatt gttttatgtg gcgacaatgg actgtcagaa  
 60  
 accaaggagc tctcctgtcc agagaagtcc ctgtttgaaa ggaattccag acacaccttt  
 120  
 atcctgagcg ctcttgccca actgggcctg ctgaggaaga tccgcctctg gcacgacagc  
 180  
 cgtgggcctt ccccaggctg gttcatcagc cacgtgatgg tgaaggagct gcacacggga  
 240  
 cagggtcgtt tcttccctgc ccagtgtctg ctgtctgccg gcaggcatga tggtcgctg  
 300  
 gagcgggagc tcacctgtct gcaaggggga ctcggcttct ggaagctttt ctattgcaag  
 360  
 ttcacagagt acctggagga tttccatgtc tggctgtcgg tgtacagcag gccctcctcc  
 420  
 agccgctacc tgcacacgcc gcgccccacc gtgtccttct cctgtctgtg cgtctacgcg  
 480  
 t  
 481

&lt;210&gt; 2076

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2076

Xaa	Ala	Arg	Leu	Thr	Ser	Lys	Val	Tyr	Ile	Val	Leu	Cys	Gly	Asp	Asn
1				5					10					15	
Gly	Leu	Ser	Glu	Thr	Lys	Glu	Leu	Ser	Cys	Pro	Glu	Lys	Ser	Leu	Phe
			20					25					30		
Glu	Arg	Asn	Ser	Arg	His	Thr	Phe	Ile	Leu	Ser	Ala	Pro	Ala	Gln	Leu
		35					40					45			
Gly	Leu	Leu	Arg	Lys	Ile	Arg	Leu	Trp	His	Asp	Ser	Arg	Gly	Pro	Ser
	50					55				60					
Pro	Gly	Trp	Phe	Ile	Ser	His	Val	Met	Val	Lys	Glu	Leu	His	Thr	Gly
65					70					75				80	
Gln	Gly	Trp	Phe	Phe	Pro	Ala	Gln	Cys	Trp	Leu	Ser	Ala	Gly	Arg	His
			85					90					95		
Asp	Gly	Arg	Val	Glu	Arg	Glu	Leu	Thr	Cys	Leu	Gln	Gly	Gly	Leu	Gly
			100					105					110		
Phe	Trp	Lys	Leu	Phe	Tyr	Cys	Lys	Phe	Thr	Glu	Tyr	Leu	Glu	Asp	Phe
	115						120					125			
His	Val	Trp	Leu	Ser	Val	Tyr	Ser	Arg	Pro	Ser	Ser	Ser	Arg	Tyr	Leu
	130					135					140				
His	Thr	Pro	Arg	Pro	Thr	Val	Ser	Phe	Ser	Leu	Leu	Cys	Val	Tyr	Ala
145					150					155					160

&lt;210&gt; 2077

&lt;211&gt; 1410

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2077

ncagagtgtt ttgagctatc tggatatcca aatgatgtga atactttcag aaaccaatgg  
60  
caaattgaac ccaactgttt gcgaattcgg cacgagtaaa gatctttttt tttttttgt  
120  
ttttttttt ttttttttt ttttgcttcc taaagtggct ttaatatcac acaagcggct  
180  
ctttggtcta cagtgaagaa aaacagaggg agccaggaaa ggctccccgc tggcctctgg  
240  
agtccaggag ccttaggaag gctgaaacaa gccctgacca gcaggcttag ttgtcctgag  
300  
aagagccagt gaggccacct ggtccagttc accaggtttc ccagggaagc acaggcatct  
360  
ctgggtcccc gagcacagt ccagggaaga ccccccaat ccccatctga acaggccgag  
420  
ggcagcatgg gaaaggctca gactgcaggt tcatcccga ggatggtaag gacacgtgct  
480  
cctccctcgc aagagcaggc ttgtgcacag ccggcacag ggccagccag ggcgccccct  
540  
gcggctgtgc agcgttacc agggggagga gttcagccat caggaccttt tccaagtggg  
600  
tctgctggtc cagcacagcc actcgcagct tgagggccgc cagggtctgc agctcctggg  
660  
tgctggagta gacaagcagc tgggnnggct ccatgcaggc tccgctctac cccacagga  
720  
cggcgaggct ccggggggcc tnnccccaca gacatggtct tggaggctgt tccgccaccg  
780  
ctgcacgcag ctctgcagc ctgtgcagac actggccac catggcctgc agccctcca  
840  
gcgtgagcag gcagcggtag tctgcaccc agtccatggg ggctgctgag agctcctccc  
900  
tcatgcgcag tctcagcagc gagcaggcct tccgcaggcg cccgcctcc gcctccacct  
960  
ccacagcact gagcctgggc tggggcccgc ctgaagctgt ctgcatgttc tggaggaact  
1020  
gggttttggc agcggcgga tccgtggaat cactggtctg tgtggaactg agctggggcc  
1080  
acaggctcga gttctgggaa gctgctttcc tgaatgccgc aggcagccgc agcaggtgcc  
1140  
ccttctcctt gagtgtgaag gcttctgggg cctgaggagc agcggatggg gccatttgc  
1200  
ggtccctgag gcccgccca ggcctggggg ttcgggctcc catcccaaca cgggtcccat  
1260  
ccccactga cagcagccgg cgctcagggt ggcccttggc aggcaccgtg gtctggcgga  
1320  
ggcccttggg ggtctctgtg tctgaagcat ggccaccagc ttggcctggg gaatgcgggtg  
1380  
gggcggaggc tgtcgtgcca gaagaggtga  
1410

&lt;210&gt; 2078

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2078

Gly His Leu Val Gln Phe Thr Arg Phe Pro Arg Glu Ala Gln Ala Ser  
 1 5 10 15  
 Leu Gly Pro Arg Ala Gln Cys Gln Gly Arg His Pro Gln Ser Pro Ser  
 20 25 30  
 Glu Gln Ala Glu Gly Ser Met Gly Lys Ala Gln Thr Ala Gly Ser Ser  
 35 40 45  
 Arg Arg Met Val Arg Thr Arg Ala Pro Pro Ser Gln Glu Gln Ala Cys  
 50 55 60  
 Ala Gln Pro Gly Thr Gly Pro Ala Arg Ala Ala Pro Ala Ala Val Gln  
 65 70 75 80  
 Arg Leu Pro Gly Gly Gly Val Gln Pro Ser Gly Pro Phe Pro Ser Gly  
 85 90 95  
 Ser Ala Gly Pro Ala Gln Pro Leu Ala Ala  
 100 105

&lt;210&gt; 2079

&lt;211&gt; 565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2079

atttacctcg caaccgaccc tgatcgtgaa ggtgaaagca tcagctggca catccagcag  
 60  
 gtactggcgg tcaaatecta caaacgcatt accttcaacg agatcactct caagcgcgtt  
 120  
 gaagaggcac tggccaatcc tcgacaaatc gatctgaaca gagttgcctc acaggaatgc  
 180  
 cggcgtgtgc ttgaccgctt ggtgggggtac ctggtgaccc aagagttgcg gcgcctgatg  
 240  
 ggcaaaccta cttccgctgg ccgcgttcaa tcaccgcgcg tggtttcttgt ggtcttgccg  
 300  
 gaacgcgaga tccgcaactt tcaggtgatc aatcactttg gcgtgcgtct gttctttgcc  
 360  
 gatgtaagtc ggggcaccac ttggtatgcc gagtggcaac cggtagcgga tttcgcaagc  
 420  
 aagcacttcc cctatgttca ggatagcaac ctggctcagc acgtcgccgg cactcgaaat  
 480  
 gtggtcgtgg agtcctgcga ggatcgcaag gccgagcgtc atcctcctgc accattcatc  
 540  
 tcateccactc ttcaacaggc cgcca  
 565

&lt;210&gt; 2080

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2080

Ile Tyr Leu Ala Thr Asp Pro Asp Arg Glu Gly Glu Ser Ile Ser Trp  
 1 5 10 15  
 His Ile Gln Gln Val Leu Ala Val Lys Ser Tyr Lys Arg Ile Thr Phe  
 20 25 30  
 Asn Glu Ile Thr Leu Lys Arg Val Glu Glu Ala Leu Ala Asn Pro Arg

```

      35          40          45
Gln Ile Asp Leu Asn Arg Val Ala Ser Gln Glu Cys Arg Arg Val Leu
  50          55          60
Asp Arg Leu Val Gly Tyr Leu Val Thr Gln Glu Leu Arg Arg Leu Met
  65          70          75          80
Gly Lys Pro Thr Ser Ala Gly Arg Val Gln Ser Pro Ala Val Phe Leu
      85          90          95
Val Val Leu Arg Glu Arg Glu Ile Arg Asn Phe Gln Val Ile Asn His
      100          105          110
Phe Gly Val Arg Leu Phe Phe Ala Asp Val Ser Arg Gly Thr Thr Trp
      115          120          125
Tyr Ala Glu Trp Gln Pro Val Pro Asp Phe Ala Ser Lys His Phe Pro
      130          135          140
Tyr Val Gln Asp Ser Asn Leu Ala Gln His Val Ala Gly Thr Arg Asn
  145          150          155          160
Val Val Val Glu Ser Cys Glu Asp Arg Lys Ala Glu Arg His Pro Pro
      165          170          175
Ala Pro Phe Ile Ser Ser Thr Leu Gln Gln Ala Ala
      180          185

```

&lt;210&gt; 2081

&lt;211&gt; 319

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2081

```

aagcttatgg aaaaacgggg atacggagag gagtatataa atcgctataa aatgatgaca
  60
agggtccatc atcaacgggt tccactagta attttgggtg gtggaactgc ctgtactgga
  120
aaatcaacaa tcgctacaca acttgcctcag aggctcaatt tgcctaattgt tttgcagacg
  180
gacatgggtg atgagctgct gcggacatca acagatgcgc cacttacttc agttcctgtg
  240
tgggctcgcg attttaattc acctgaagag cttatcactg aattctgcag agaatgcaga
  300
gttgtacgca agggtttgg
  319

```

&lt;210&gt; 2082

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2082

```

Lys Leu Met Glu Lys Arg Gly Tyr Gly Glu Glu Tyr Ile Asn Arg Tyr
  1          5          10          15
Lys Met Met Thr Arg Phe His His Gln Arg Val Pro Leu Val Ile Leu
      20          25          30
Val Cys Gly Thr Ala Cys Thr Gly Lys Ser Thr Ile Ala Thr Gln Leu
      35          40          45
Ala Gln Arg Leu Asn Leu Pro Asn Val Leu Gln Thr Asp Met Val Tyr
      50          55          60
Glu Leu Leu Arg Thr Ser Thr Asp Ala Pro Leu Thr Ser Val Pro Val

```

65                      70                      75                      80  
Trp Ala Arg Asp Phe Asn Ser Pro Glu Glu Leu Ile Thr Glu Phe Cys  
                              85                      90                      95  
Arg Glu Cys Arg Val Val Arg Lys Gly Leu  
                              100                      105

```
<210> 2083
<211> 382
<212> DNA
<213> Homo sapiens
```

```
<400> 2083
nngcctgatt gcgacatggc cgtcgagtgc gctgtaacac gcaagcagct atataccatc
60
atacctactg ttgaatgcaa ctgtggccac gttttctgct ttggctgtgg tttggatgga
120
caccagccgg tcatttgtgc tgttgctcgc ttgtggctga aaaaatgtgc ggatgacagt
180
gagacgtcca actggatcgg cgctaatacc aaggaatgcc ccaaatgctg ttcgacgatt
240
gaaaagaatg gcggatgtaa tcatatgacg tgtcgcaagt gcaaatacga attttgttgg
300
atttgctcgg gcccatggtc ggagcacgga aacaactatt acaactgcaa tcgggtacgat
360
gaaaaggcag gagatgaagg tn
382
```

```
<210> 2084
<211> 127
<212> PRT
<213> Homo sapiens
```

<400> 2084																
Xaa	Pro	Asp	Cys	Asp	Met	Ala	Val	Glu	Cys	Ala	Val	Thr	Arg	Lys	Gln	
1				5					10					15		
Leu	Tyr	Thr		Ile	Pro	Thr	Val	Glu	Cys	Asn	Cys	Gly	His	Val	Phe	
			20					25					30			
Cys	Phe	Gly	Cys	Gly	Leu	Asp	Gly	His	Gln	Pro	Val	Ile	Cys	Ala	Val	
		35					40					45				
Val	Arg	Leu	Trp	Leu	Lys	Lys	Cys	Ala	Asp	Asp	Ser	Glu	Thr	Ser	Asn	
	50					55					60					
Trp	Ile	Gly	Ala	Asn	Thr	Lys	Glu	Cys	Pro	Lys	Cys	Cys	Ser	Thr	Ile	
65					70					75					80	
Glu	Lys	Asn	Gly	Gly	Cys	Asn	His	Met	Thr	Cys	Arg	Lys	Cys	Lys	Tyr	
				85					90					95		
Glu	Phe	Cys	Trp	Ile	Cys	Ser	Gly	Pro	Trp	Ser	Glu	His	Gly	Asn	Asn	
			100					105					110			
Tyr	Tyr	Asn	Cys	Asn	Arg	Tyr	Asp	Glu	Lys	Ala	Gly	Asp	Glu	Gly		
		115					120					125				

```
<210> 2085
<211> 478
<212> DNA
<213> Homo sapiens
```



<400> 2085  
 nnggatccca aagaccgcca tattgccatg gtgttccaaa actatgccct ctaccgcac  
 60  
 atgactgtcg ccgacaacat gggttttgcc ctcaaactgg cgaaagtgga taagaaagaa  
 120  
 atccggcgctc gcgtggagga agccgccgaa ctccctcgacc tcaccgacta tctggaccgc  
 180  
 aaacccaagg cactctccgg tggccagcgg cagcgcgctcg ccatggggcg cgctattgtt  
 240  
 cgttccccc gcgtcttctt gatggacgag cctctttcta acctggatgc gcgtctgcgt  
 300  
 gtccgcaccc gcgccagat tgcggaactg cagcgccgcc tgggcaccac caccgtttat  
 360  
 gtcacccatg accaggtgga ggctatgacg atgggggatc gtgtggctgt tctctgtgcc  
 420  
 gggaaaactgc agcaggtgga tactccacgt aatcttttcg accacccgc taacgcgt  
 478

<210> 2086  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 2086  
 Xaa Asp Pro Lys Asp Arg Asp Ile Ala Met Val Phe Gln Asn Tyr Ala  
 1 5 10 15  
 Leu Tyr Pro His Met Thr Val Ala Asp Asn Met Gly Phe Ala Leu Lys  
 20 25 30  
 Leu Ala Lys Val Asp Lys Lys Glu Ile Arg Arg Arg Val Glu Glu Ala  
 35 40 45  
 Ala Glu Leu Leu Asp Leu Thr Asp Tyr Leu Asp Arg Lys Pro Lys Ala  
 50 55 60  
 Leu Ser Gly Gly Gln Arg Gln Arg Val Ala Met Gly Arg Ala Ile Val  
 65 70 75 80  
 Arg Ser Pro Arg Val Phe Leu Met Asp Glu Pro Leu Ser Asn Leu Asp  
 85 90 95  
 Ala Arg Leu Arg Val Arg Thr Arg Ala Gln Ile Ala Glu Leu Gln Arg  
 100 105 110  
 Arg Leu Gly Thr Thr Thr Val Tyr Val Thr His Asp Gln Val Glu Ala  
 115 120 125  
 Met Thr Met Gly Asp Arg Val Ala Val Leu Cys Ala Gly Lys Leu Gln  
 130 135 140  
 Gln Val Asp Thr Pro Arg Asn Leu Phe Asp His Pro Ala Asn Ala  
 145 150 155

<210> 2087  
 <211> 731  
 <212> DNA  
 <213> Homo sapiens

<400> 2087  
 gataattctc tacacggcat gagctgggga cgtaccccc ttgccaacgt cacctcacgg  
 60

tcgtaccgtg gtgattagca gctagccgag gcgctagccg ccatataaga ttcccaaatt  
 120  
 aaaagaaaaa gcattgcgtc ggccaagaat tgctgtcgct gctgcaacgg ctactgcgct  
 180  
 ggtcggatca atcgcagcaa tcacccctc cccagggcag aagctaactc caataggcca  
 240  
 cgctcggtag ctcaagccgc tatcgccacg gatggaaagg ggataatcaa caaggactgc  
 300  
 cgtgatgcag tcatcaacga tgcaaagctg cgtgcccgga ttgccggtgc gttggttaag  
 360  
 gctggattta gttccgccga cgcggtggct ctagcgccgc gtattgccag agaaatggca  
 420  
 aaagagggcg tcttcctcat caaccaccac aagctaaagg ctctcatcgg agcccagggtg  
 480  
 ggtctgctca ctgatgcgaa gatccagcgt gctgccgctg cagtggacct cggcatcaaa  
 540  
 gccactctag ctgcgacaat cattcccaac gcgctgcatt cagcggcatt caaggatgcg  
 600  
 gtggtcgcaa atcttgtcgc cgccggtctg acaagaagtt ggcaaaggct acggctgtcg  
 660  
 ccattgccgc aactgcgctc aatcccgcctc tcgggccgat cgcaaagact gaggccatta  
 720  
 aggctgagat c  
 731

&lt;210&gt; 2088

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2088

Met	Ala	Lys	Glu	Gly	Val	Leu	Leu	Ile	Asn	His	His	Lys	Leu	Lys	Ala
1			5					10					15		
Leu	Ile	Gly	Ala	Gln	Val	Gly	Leu	Leu	Thr	Asp	Ala	Lys	Ile	Gln	Arg
	20						25						30		
Ala	Ala	Ala	Ala	Val	Asp	Leu	Gly	Ile	Lys	Ala	Thr	Leu	Ala	Ala	Thr
	35						40					45			
Ile	Ile	Pro	Asn	Ala	Leu	His	Ser	Ala	Ala	Phe	Lys	Asp	Ala	Val	Val
	50				55					60					
Ala	Asn	Leu	Val	Ala	Ala	Gly	Leu	Thr	Arg	Ser	Trp	Gln	Arg	Leu	Arg
65				70					75				80		
Leu	Ser	Pro	Leu	Pro	Gln	Leu	Arg	Ser	Ile	Pro	Leu	Ser	Gly	Arg	Ser
			85					90					95		
Gln	Arg	Leu	Arg	Pro	Leu	Arg	Leu	Arg							
	100						105								

&lt;210&gt; 2089

&lt;211&gt; 315

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2089

accggtgtgg accaggtcga gctgcgcgac gccatgtttt cctaccttcc ccaccacaag  
 60

ctcggggaat tcgacatcga tctgttgctg gaccatcgcg attcccgtca gcccatcacc  
 120  
 ttcgacaccg accacttcga ggggtacgag cgcccccgcc tcgtgctgca cgaagtcacc  
 180  
 gatcaacttg gccaaagcgtt ccttgatttg gaaggcccag agccggctct cggctgggaa  
 240  
 tcgttggtgg cgtctctcac gagtcttgct gactctatgg ggatccgtct gaccggcatt  
 300  
 accgattcga tcccg  
 315

<210> 2090  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2090  
 Thr Gly Val Asp Gln Ala Gln Leu Arg Asp Ala Met Phe Ser Tyr Leu  
 1 5 10 15  
 Pro His His Lys Leu Gly Glu Phe Asp Ile Asp Leu Leu Leu Asp His  
 20 25 30  
 Arg Asp Ser Arg Gln Pro Ile Ile Phe Asp Thr Asp His Phe Glu Gly  
 35 40 45  
 Tyr Glu Arg Pro Arg Leu Val Leu His Glu Val Thr Asp Gln Leu Gly  
 50 55 60  
 Gln Ala Phe Leu Val Leu Glu Gly Pro Glu Pro Ala Leu Gly Trp Glu  
 65 70 75 80  
 Ser Leu Val Ala Ser Leu Thr Ser Leu Val Asp Ser Met Gly Ile Arg  
 85 90 95  
 Leu Thr Gly Ile Thr Asp Ser Ile Pro  
 100 105

<210> 2091  
 <211> 322  
 <212> DNA  
 <213> Homo sapiens

<400> 2091  
 actcttgccc attgtctctg tctctgcgtt tttctctctg tctctctgtg tctctgtctc  
 60  
 tgtgtccctg tccagttctg tnnctgtgtg tgcgcgcacc tctctctgtg tctctgtnnn  
 120  
 agtctctgtc tcttttgtct ctgtctctct ctgtgtctct gcccatcttg gtctctgctt  
 180  
 tctttctctt gtgtgtctct ccatttctgt ctctctctct ctgtctctct ccatttctgt  
 240  
 ctctgtctct tttctctctg tgtgtctctt ttgtctctct gttctctctg gtgtctctgt  
 300  
 ccatttctgt cccttcacgc gt  
 322

<210> 2092  
 <211> 107  
 <212> PRT

<213> Homo sapiens

<400> 2092

```

Thr Leu Val His Cys Leu Cys Leu Cys Val Phe Leu Ser Val Ser Leu
 1           5           10           15
Cys Leu Cys Leu Cys Val Pro Val Gln Phe Cys Xaa Cys Val Cys Ala
 20           25           30
His Leu Ser Leu Cys Leu Cys Xaa Ser Leu Cys Leu Phe Cys Leu Cys
 35           40           45
Leu Ser Leu Cys Leu Cys Pro Phe Trp Ser Leu Leu Ser Phe Leu Cys
 50           55           60
Val Ser Leu His Phe Cys Leu Ser Ser Ser Val Ser Leu His Phe Cys
 65           70           75           80
Leu Cys Ser Phe Ser Leu Cys Val Ser Leu Leu Ser Leu Cys Phe Ser
 85           90           95
Ala Cys Leu Cys Pro Phe Leu Ser Leu His Ala
 100           105

```

<210> 2093

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2093

```

gccggcggtca tgcaaacgat caaggtggcg caatttcgcc tctgccatag tcgaaaaatg
60
tttgtggtgg cctacccgcg agagaccag gagatggtgc tcgatgcgca taaccgcgcc
120
tttgcgttct ttggcggcgt accgcagcgg gttatctacg acaaccttaa aaccgcagtg
180
gatgcgatct tggtcggcaa ggatcgaatc ttcaaccggc gcttcctggc gttggctaata
240
cattacctgt ttgaacctgt agcctgtacg cctgctgctg gctgggagaa gggccaagtt
300
gagaatcaag ttcgcaacat acgc
324

```

<210> 2094

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2094

```

Ala Gly Val Met Gln Thr Ile Lys Val Ala Gln Phe Arg Leu Cys His
 1           5           10           15
Ser Arg Lys Met Phe Val Val Ala Tyr Pro Arg Glu Thr Gln Glu Met
 20           25           30
Val Leu Asp Ala His Asn Arg Ala Phe Ala Phe Phe Gly Gly Val Pro
 35           40           45
Gln Arg Val Ile Tyr Asp Asn Leu Lys Thr Ala Val Asp Ala Ile Leu
 50           55           60
Val Gly Lys Asp Arg Ile Phe Asn Arg Arg Phe Leu Ala Leu Ala Asn
 65           70           75           80
His Tyr Leu Phe Glu Pro Val Ala Cys Thr Pro Ala Ala Gly Trp Glu

```

85 90 95  
 Lys Gly Gln Val Glu Asn Gln Val Arg Asn Ile Arg  
 100 105

<210> 2095  
 <211> 402  
 <212> DNA  
 <213> Homo sapiens

<400> 2095  
 cccgtcacag accaggaaga agcagacaat atgacgcgtt ctttcgacac ttatgttcgc  
 60  
 accctgcccc ccgcgcgcaa tctttctgctt aaacaattcc atattgtgga tgttgcccgg  
 120  
 cgcgtggtgg gcgtgggttc agtgggcacc cactccctgg tactgctact gtccggcccc  
 180  
 aatgatgaac ctcttgtgct gcaagtgaag gaagccctcc ccagtgtcct caccacccat  
 240  
 gggaaactgc cggatgcttt ttcggaactg tccgctgggg actcctccgg gctcctcccc  
 300  
 gataatcttg ataagcatat taaagccggc aatggctacc ggggtggtggc gtgccagcag  
 360  
 attctgcagg ccactcggga tccgctgctg ggggtggacgc gt  
 402

<210> 2096  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

<400> 2096  
 Pro Val Thr Asp Gln Glu Glu Ala Asp Asn Met Ile Ala Ser Phe Asp  
 1 5 10 15  
 Thr Tyr Val Arg Thr Leu Pro Pro Ala Ala Asn Leu Leu Leu Lys Gln  
 20 25 30  
 Phe His Ile Val Asp Val Ala Arg Arg Val Val Gly Val Gly Ser Val  
 35 40 45  
 Gly Thr His Ser Leu Val Leu Leu Leu Ser Gly Pro Asn Asp Glu Pro  
 50 55 60  
 Leu Val Leu Gln Val Lys Glu Ala Leu Pro Ser Val Leu Thr Thr His  
 65 70 75 80  
 Gly Lys Leu Pro Asp Ala Phe Ser Glu Leu Ser Ala Gly Asp Ser Ser  
 85 90 95  
 Gly Leu Leu Pro Asp Asn Leu Asp Lys His Ile Lys Ala Gly Asn Gly  
 100 105 110  
 Tyr Arg Val Val Ala Cys Gln Gln Ile Leu Gln Ala His Ser Asp Pro  
 115 120 125  
 Leu Leu Gly Trp Thr Arg  
 130

<210> 2097  
 <211> 641  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2097

ncgttttctca cccgccctcc agcctcatca gcagctgtgg gctcaggccc ccctcccag  
 60  
 gcggagcagg cgtggccgca gagcagcggg gaggaggagc tgcagctcca gctggccctg  
 120  
 gccatgagca aggaggaggc cgaccaggta ctgggcgtgc agctggggct gtctgtccgc  
 180  
 caccgcctc cagcctcac ttcaggctcc ctcccagcca ggcgtagggc tggecctcac  
 240  
 tgctcgtgct ccacatgctg tcaactgtct cctccccagt cctgcctcat cctcacnccg  
 300  
 ccgtccctct gcgtgtcaact ctctgcctgt cctcactggt tcagggaccc ccagcctctc  
 360  
 tttattcggc tctatctgac cctggctctg cctctgactc tgcctctggc ccctcccgtc  
 420  
 atgccccctca cactctctct cccccagccc ccgtcctgcg gccccgagga cyacgcccag  
 480  
 ctccagctgg cccttagttt gagccgagaa gagcatgata aggtcagagc agcctccctg  
 540  
 tccctgcccc tgccaggggc tccccacaga ccagccccgt cgccccctcc taagtcaccc  
 600  
 cccaccatcc tgctggggccc gaagcccaca ggctcacgcg t  
 641

&lt;210&gt; 2098

&lt;211&gt; 213

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2098

Xaa	Phe	Leu	Thr	Arg	Pro	Pro	Ala	Ser	Ser	Ala	Ala	Val	Gly	Ser	Gly
1				5					10					15	
Pro	Pro	Pro	Glu	Ala	Gly	Gln	Ala	Trp	Pro	Gln	Ser	Ser	Gly	Glu	Glu
			20					25					30		
Glu	Leu	Gln	Leu	Gln	Leu	Ala	Leu	Ala	Met	Ser	Lys	Glu	Glu	Ala	Asp
		35					40					45			
Gln	Val	Leu	Gly	Val	Gln	Leu	Gly	Leu	Ser	Val	Arg	His	Pro	Pro	Pro
	50					55				60					
Arg	Leu	Thr	Ser	Gly	Ser	Leu	Pro	Ala	Arg	Arg	Gly	Pro	Gly	Pro	His
65					70					75				80	
Cys	Arg	Cys	Ser	Thr	Cys	Cys	His	Ser	Ser	Pro	Pro	Gln	Ser	Cys	Leu
				85					90					95	
Ile	Leu	Thr	Pro	Pro	Ser	Leu	Cys	Val	Ser	Leu	Ser	Ala	Cys	Pro	His
			100					105					110		
Trp	Phe	Arg	Asp	Pro	Gln	Pro	Leu	Phe	Ile	Arg	Leu	Tyr	Leu	Thr	Leu
			115				120					125			
Ala	Leu	Pro	Leu	Thr	Leu	Pro	Leu	Ala	Pro	Pro	Val	Met	Pro	Leu	Thr
	130					135					140				
Leu	Ser	Leu	Pro	Gln	Pro	Pro	Ser	Cys	Gly	Pro	Glu	Asp	Asp	Ala	Gln
145					150					155				160	
Leu	Gln	Leu	Ala	Leu	Ser	Leu	Ser	Arg	Glu	Glu	His	Asp	Lys	Val	Arg
				165					170					175	
Ala	Ala	Ser	Leu	Ser	Leu	Pro	Leu	Pro	Gly	Ala	Pro	Leu	Arg	Pro	Ala

```

          180          185          190
Pro Ser Pro Leu Pro Lys Ser Pro Pro Thr Ile Leu Leu Gly Pro Lys
          195          200          205
Pro Thr Gly Ser Arg
          210

```

<210> 2099  
 <211> 347  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2099
acgcgtgtgc cctgtcccct gccagacatg gacagcacct gccacagggg gtgctcagtg
60
gaggcagtgc ccagggtgc tgtgcccattg cgtgtaccct gtcctctgcc agacgcggac
120
agcacctgcc cacgggggtgc tcagtggagg cagtgccag ggctgctgtg cccacgtgtg
180
tgccctcaga catccctccc cagacacttg ctgcatgacc caggaggtgg caggcagtgg
240
cagtattctg ttcaggtgag ctgagaggtg gcaggtgcct ggctgcggcc ctgcctcact
300
ccgacagcct ctgcctccag tccactggct catccacat ggctga
347

```

<210> 2100  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2100
Met Asp Ser Thr Cys Pro Gln Gly Cys Ser Val Glu Ala Val Pro Arg
1      5      10      15
Ala Ala Val Pro Met Arg Val Pro Cys Pro Leu Pro Asp Ala Asp Ser
20     25     30
Thr Cys Pro Arg Gly Ala Gln Trp Arg Gln Cys Pro Gly Leu Leu Cys
35     40     45
Pro Arg Val Cys Pro Gln Thr Ser Leu Pro Arg His Leu Leu His Asp
50     55     60
Pro Gly Gly Gly Arg Gln Trp Gln Tyr Ser Val Gln Val Ser Ser Glu
65     70     75     80
Val Ala Gly Ala Trp Leu Arg Pro Cys Leu Thr Pro Thr Ala Ser Ala
85     90     95
Ser Ser Pro Leu Ala His Pro Thr Trp Pro
100    105

```

<210> 2101  
 <211> 549  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2101
ctctctccga ccgcgttgac ggtccagccg gtccgcacgc cgtcatcgga atcggcacga
60

```

acgttttcgat ggggcgtgac gaattgcccc tgccgacggc gacctctctg gctctgtgtg  
 120  
 gggtgaacca cgacaagaat gagttgctgg ccagccttct catccacctt gacgagctat  
 180  
 taacagtgtg gttggagacc ggaacggtgc gggatcagta tgtggcccgc tgtgacacca  
 240  
 ttggtactcc ggtccgtctg accttcgacc cagaaatcgt ggggtggtggg gagggggcca  
 300  
 ttgagggcat cgggtgctgac gttgacgttg atggcgctat cgtggtggaa acttctgacg  
 360  
 ggcgctgcag tttcaacgct gctgacgttc atcatttgcg aaccaggtga gttccgctac  
 420  
 ggcgctcctga gcgttccac catctagact gctgactatg acgaccacaca ttttggccct  
 480  
 tggtggtggc ggtttctcga tgctgaaccg cggtgagcct accgctctcg accgtcacat  
 540  
 ccctgacct  
 549

<210> 2102

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2102

Met	Gly	Arg	Asp	Glu	Leu	Pro	Leu	Pro	Thr	Ala	Thr	Ser	Leu	Ala	Leu
1			5					10					15		
Cys	Gly	Leu	Asn	His	Asp	Lys	Asn	Glu	Leu	Leu	Ala	Ser	Leu	Leu	Ile
			20				25						30		
His	Leu	Asp	Glu	Leu	Leu	Thr	Val	Trp	Leu	Glu	Thr	Gly	Thr	Val	Arg
			35				40					45			
Asp	Gln	Tyr	Val	Ala	Arg	Cys	Asp	Thr	Ile	Gly	Thr	Pro	Val	Arg	Leu
			50			55				60					
Thr	Phe	Asp	Pro	Glu	Ile	Val	Gly	Gly	Gly	Glu	Gly	Ala	Ile	Glu	Gly
65					70					75				80	
Ile	Gly	Val	Asp	Val	Asp	Val	Asp	Gly	Ala	Ile	Val	Val	Glu	Thr	Ser
			85					90					95		
Asp	Gly	Arg	Arg	Ser	Phe	Asn	Ala	Ala	Asp	Val	His	His	Leu	Arg	Thr
			100					105					110		

Arg

<210> 2103

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2103

nnacgcgtga cttatacacc gggacgcaat gcgacggcaa cggcagagca cactatcgcc  
 50  
 atgattatgg cggcagtgcg acagatcccc gccaccatg agttactcgc ttcaggggtt  
 120  
 tgggaggggg acgcatatcg gtacgaccag gttggtatgg aaatcaaagg gaatgacgtc  
 180



ggtatcgtcg gatgaggagc ggtegggtgc cgggttgagg ctgtgatggc ggccatgggt  
 240  
 gcgaccgtgc gtgtcttcga cccgtgggccc actcctgatt cttttccagc tggcgtgatg  
 300  
 gcatgtgatg atctcgatga ggttctgagg ctccagccga tcctcactct ccacgctcgt  
 360  
 gccaacgagg acaaccgtca catgattggc gttgaacaat tagctgagat gcctgatggc  
 420  
 tccgtcctcg tcaactgtgc ccgtggctcg ctggtcgac  
 459

<210> 2104

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2104

Xaa	Arg	Val	Thr	Tyr	Thr	Pro	Gly	Arg	Asn	Ala	Thr	Ala	Thr	Ala	Glu
1				5					10					15	
His	Thr	Ile	Ala	Met	Ile	Met	Ala	Ala	Val	Arg	Gln	Ile	Pro	Ala	His
		20					25					30			
His	Glu	Leu	Leu	Ala	Ser	Gly	Val	Trp	Glu	Gly	Asp	Ala	Tyr	Arg	Tyr
	35					40					45				
Asp	Gln	Val	Gly	Met	Glu	Ile	Lys	Gly	Asn	Asp	Val	Gly	Ile	Val	Gly
	50				55					60					
Cys	Gly	Ala	Val	Gly	Cys	Arg	Val	Ala	Ala	Val	Met	Ala	Ala	Met	Gly
65					70				75					80	
Ala	Thr	Val	Arg	Val	Phe	Asp	Pro	Trp	Ala	Thr	Pro	Asp	Ser	Phe	Pro
			85					90						95	
Ala	Gly	Val	Met	Ala	Cys	Asp	Asp	Leu	Asp	Glu	Val	Leu	Arg	Leu	Ser
			100					105					110		
Arg	Ile	Leu	Thr	Leu	His	Ala	Arg	Ala	Asn	Glu	Asp	Asn	Arg	His	Met
	115						120					125			
Ile	Gly	Val	Glu	Gln	Leu	Ala	Glu	Met	Pro	Asp	Gly	Ser	Val	Leu	Val
	130					135					140				
Asn	Cys	Ala	Arg	Gly	Ser	Leu	Val	Asp							
145						150									

<210> 2105

<211> 4057

<212> DNA

<213> Homo sapiens

<400> 2105

nnggaaaagc tccgtctagg gggcccccag catgcctgga agtcttgtgc atctgcctag  
 60  
 agctgaagct ttgggtctgt cctggctttg ccaggcagcc agttttatct cctttgttca  
 120  
 cccctatatg gctccagtcg gttttggggg gggcagctaa gtgggggagg gggaacacaa  
 180  
 aagtttgggc aaaacattaa cctgacaaag cttgattccg gaaaaaatc cctcaagagc  
 240  
 gcaaggccag cttagccaac tggcagctga gtggaaaggc tcagtcctct cgggcagctc  
 300

cggtggcacc tagaggggag aggggtgcagg ctttgaagcc agaaagacat ggatgcaagt  
360  
cttactttgc ttcttgcgtg taccagttgg cctgacctta ggaaatgtta tttaatctct  
420  
ctccagttgt tccccctgga gaaagccctg tcagcctgag gatccaagac gcgtacgtaa  
480  
agtgtctgat ttcagccagt gtcccttccct gtcccttccct ggggtgtgtg tcggttgccc  
540  
tgagcgaccg gccatgggac tctgtcgtga taaccaagct tcaggggtgtg ggaagaggac  
600  
agtcagtgtc tccttggggc atcactcggg aacatcatgg gcataaaca aagtactcag  
660  
tcttcaaggt cataaagtaa ccagagtgtg ttccttttgt tttcagatct cttacctcag  
720  
ctagaagctc cgagtctctc tactcccagc agtgaactca gcagcccagg ccaaagttag  
780  
ctcactaaca tggatcttgc tgcactcttc tctgacacac ctgccaatgc tagtggttct  
840  
gcagggtggg cggtatgagg tctgaactcc ggaatcctga ctattgacgt cacttctgtg  
900  
agctcctctc tgggagggaa cctccctgct aataatagct ccctagggcc gatggaaccc  
960  
ctggctcctg tggcccacag tgatattccc ccaagcctgg acagccctct ggttctcggg  
1020  
acagcagcca cgggtctgca gcagggcagc ttcagtgtgg atgacgtgca gactgtgagt  
1080  
gcaggagcat taggtctgtc ggtggctctg cccatgaaga acttgagtga cgacccactg  
1140  
gctttgacct ccaatagtaa cttagcagca catatcacca caccgacctc ttcgagcacc  
1200  
ccccgagaaa atgccagtgt cccggaactg ctgggtccaa tcaaggtgga gccggactcg  
1260  
ccttctcgcc caggagcagt tgggcagcag gaaggaagcc atgggctgcc ccagtccacg  
1320  
ttgcccagtc cagcagagca gcacggtgcc caggacacag agctcagtgc aggcactggc  
1380  
aacttctatt tggatgaag cactctattc agtcaccacc atataggtca cttctctcat  
1440  
actcggctct gaggatattc tggattaatc ctttctatgc agacgtttct ggtttacaaa  
1500  
aggacgcagc cctggactac aagtctggaa ctgacaagtt cttatgacct tgacaaatca  
1560  
ccttaacca tctgagcctt aaattctcat ttatttctct cataaggaga tttggctaaa  
1620  
tgctttctga ggtcctttgg agtcctgtgg ctccatggta atgtgctcct ttccttgaag  
1680  
attgggggtt ttgtaatgtt gagatacttt gcctctatgc ttgtcagctc atgaccagtc  
1740  
ctagaagagg agtcgagaca taagccacct tcagaggttc aatggaaact ttaaaacat  
1800  
accaaactct tttttaaaat tagaattaac aagaaaaaaa aaaggggtgg gtttatgagc  
1860  
cttagttctt ggaggattat aagagtactt ccccagtttt gaggctggac agttaatata  
1920

ctttatatca attatacatt taatataatt taatttataa taattttaaag attcttagga  
1980  
gatagtcctga ctttcctgac ctagatggga atgatcagat agggatTTTT tttgtggcac  
2040  
aggctaaatt tgaagggtgac atttatattg ttgagaatgt tacatcttat tttaccacaa  
2100  
cttttaaaaa atgttacatc ttttgcagta ggatcagttg tgaggcacat agtagctgag  
2160  
gctccatgga gccacctttc atttctttca gtcagagagg aggacagtct ctgtctctgc  
2220  
attctggtg tcttgcttgt cgggtggcaga gccatgcttg ccggcatattg cttaggtggc  
2280  
catagtagtt gctaagtgtg caggtgactg ggcagggatg ggaggtggcc acaggtcaga  
2340  
gacaagtgtc cagtcagtc cttgtgccag gactgtgtgc ctccgtgcct tgggaaatgg  
2400  
aagctccctg gtgcagctgc agctgtgggt ggaggtagag aagccagcaa gaccttggtc  
2460  
ttaacccctg gttcattttc ttgctagctg tgtgacgttg ggctacctcg cttctctgag  
2520  
tacaaaagggt gtgtgggtgaa tgggtcccag gtatgctacg agctttgagg gctgctcttt  
2580  
ttctcttcac agcgataagt gttaactgt ctttcttagg aaacgttcac agacttgcaa  
2640  
cagctgatgt cctctgagta ctgtctgact cctcaggca agttcctgaa ttcagtacca  
2700  
tcattattat ttttgtgtaa gactttgaca aagtatagcc cctgccacca gagcagcctg  
2760  
tacagtgggt ctctaagggt ggacctgccc cgggcctgccc atgcacgtgt gtgaaacagc  
2820  
gtgaaaagtg tcgcggtaag gtgacctggt gttaccagg caaggctcgg tgtttgtttc  
2880  
agaaaagcaga gaagtatgta attgatttta aaagtttctg tttaaaatat ttggctatgt  
2940  
tttagactat gaaggatga actttgcttc tctggataag aaagtcacat acattgttcc  
3000  
agctccaagt ttgttcggcc ctgccacaa gtggatgtag cgtttggccc tttgtgtgcc  
3060  
ttgctgggtga ctctggtttt gggagctcgg atatgtccca gaagcaggct tatggcactt  
3120  
ctgtagctcc cttgctaccc ttctttgtg tctagataag tgactgacat gcttttcttt  
3180  
ggtctcagga aagtgggggc tcagcaagaa ctgattaccg agccattcaa ctagccaagg  
3240  
aaaaaaagca gagaggagcg gggagcaatg caggtgaggc cgtgtgtgct gcagccggac  
3300  
gagcaagggc ctgagggttc tctgtcactg ttactggcag aagaaacaca gcagggtttt  
3360  
ctgtgctctt ggttttacgt ttctgttcag aatacccttt tatcaactcc ttagttttat  
3420  
ttgaacttaa gggaaaaaat tagtaacaaa attcccagca tcagtatgaa catattttat  
3480  
ttgcctaaac aagctttgtg aaagttaagc gttcaaacac cagtgtcagt tacctggaag  
3540

gctactaagg taaataagca aagcaggcca gttgtcagga aagcagagat tgtgcctggg  
 3600  
 gctgaatggc cttggggcct gatcttggca tggcagagac ctggggactg ccactgtccc  
 3660  
 caggtacgtg tacatggagc caaactgtgt gtcctgtggc attgtcagag ttatgttgaa  
 3720  
 atcttatttg aaaatgttag caacttactt gcatttttaa agaccaaaca agagctggta  
 3780  
 acctatggcc tcaagcatct gtccttccta aaaatggaat agtgggatgt agtgcttaat  
 3840  
 ggaaactgct aaatcttttt ctaaaaacta acagtggatt tttaaaatat attgtttttt  
 3900  
 gtgtatttca ttgtccttt gtatttatct aaaagggttg atatgatttt atatcttgct  
 3960  
 ctctattcct aatagtatta tgacttccta tttaaaataa ataacaattg ccggttttct  
 4020  
 gttaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa  
 4057

&lt;210&gt; 2106

&lt;211&gt; 240

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2106

Ser	Asn	Gln	Ser	Val	Phe	Leu	Leu	Phe	Ser	Asp	Leu	Leu	Pro	Gln	Leu
1				5					10					15	
Glu	Ala	Pro	Ser	Ser	Leu	Thr	Pro	Ser	Ser	Glu	Leu	Ser	Ser	Pro	Gly
			20					25					30		
Gln	Ser	Glu	Leu	Thr	Asn	Met	Asp	Leu	Ala	Ala	Leu	Phe	Ser	Asp	Thr
			35				40					45			
Pro	Ala	Asn	Ala	Ser	Gly	Ser	Ala	Gly	Gly	Ser	Asp	Glu	Ala	Leu	Asn
	50				55					60					
Ser	Gly	Ile	Leu	Thr	Ile	Asp	Val	Thr	Ser	Val	Ser	Ser	Ser	Leu	Gly
65				70				75						80	
Gly	Asn	Leu	Pro	Ala	Asn	Asn	Ser	Ser	Leu	Gly	Pro	Met	Glu	Pro	Leu
			85					90					95		
Val	Leu	Val	Ala	His	Ser	Asp	Ile	Pro	Pro	Ser	Leu	Asp	Ser	Pro	Leu
			100					105					110		
Val	Leu	Gly	Thr	Ala	Ala	Thr	Val	Leu	Gln	Gln	Gly	Ser	Phe	Ser	Val
			115				120					125			
Asp	Asp	Val	Gln	Thr	Val	Ser	Ala	Gly	Ala	Leu	Gly	Cys	Leu	Val	Ala
	130				135					140					
Leu	Pro	Met	Lys	Asn	Leu	Ser	Asp	Asp	Pro	Leu	Ala	Leu	Thr	Ser	Asn
145				150					155					160	
Ser	Asn	Leu	Ala	Ala	His	Ile	Thr	Thr	Pro	Thr	Ser	Ser	Ser	Thr	Pro
			165					170					175		
Arg	Glu	Asn	Ala	Ser	Val	Pro	Glu	Leu	Leu	Ala	Pro	Ile	Lys	Val	Glu
			180					185					190		
Pro	Asp	Ser	Pro	Ser	Arg	Pro	Gly	Ala	Val	Gly	Gln	Gln	Glu	Gly	Ser
		195				200					205				
His	Gly	Leu	Pro	Gln	Ser	Thr	Leu	Pro	Ser	Pro	Ala	Glu	Gln	His	Gly
	210				215					220					
Ala	Gln	Asp	Thr	Glu	Leu	Ser	Ala	Gly	Thr	Gly	Asn	Phe	Tyr	Leu	Val

225 230 235 240

<210> 2107  
<211> 305  
<212> DNA  
<213> Homo sapiens

<400> 2107  
ggtagccatcc ctcagcccca cccagacatg gctcagggtgc ctatgttgaa tctgctccca  
60  
agtccttggtc tggctctcgt tccagatctt aatgattctt tgagtccagt ctcaggggag  
120  
gcctcaggcc tgggtgtctga aaacaccccc agacctgatg acagcagagc tatcgctcca  
180  
gcctccctcc aaatcaccag ttcttgttct ggtgaacccc tggacctgga ttccaaggat  
240  
gtctcaaggc ctgactcaca ggggcgcctc tgtccagcct caaaccccat tctggcccn  
300  
ccnccn  
305

<210> 2108  
<211> 92  
<212> PRT  
<213> Homo sapiens

<400> 2108  
Met Ala Gln Val Pro Met Leu Asn Leu Leu Pro Ser Pro Gly Leu Ala  
1 5 10 15  
Leu Val Pro Asp Leu Asn Asp Ser Leu Ser Pro Val Ser Gly Glu Ala  
20 25 30  
Ser Gly Leu Val Ser Glu Asn Thr Pro Arg Pro Asp Asp Ser Arg Ala  
35 40 45  
Ile Ala Pro Ala Ser Leu Gln Ile Thr Ser Ser Cys Ser Gly Glu Pro  
50 55 60  
Leu Asp Leu Asp Ser Lys Asp Val Ser Arg Pro Asp Ser Gln Gly Arg  
65 70 75 80  
Leu Cys Pro Ala Ser Asn Pro Ile Leu Ala Xaa Pro  
85 90

<210> 2109  
<211> 700  
<212> DNA  
<213> Homo sapiens

<400> 2109  
naccggtcac ccacgcagac catggcagcc gccgacgggt cgctcttcga caaccccagg  
60  
acgtctctcca gacgtccccc agcccaggcg agtcggcaag caaaggctac gaaaagaaaa  
120  
taccaagcgt ccagtgaagg tccccagcg aaacggagga acgaaacttc atttctccca  
180  
gccaagaaaa ctagtgttaa agaaactcag aggactttta aggggaacgc acaaaaaaatg  
240

ttttctccaa agaagcattc ggtagcaca agttagataga accaggagga gagacagtgc  
 300  
 attaagactt catcactgtt taaaaacaac cctgacattc cagaactcca cagacctgtg  
 360  
 gtaaagcagg tgcaagaaaa agtgtttact tcagctgctt ttcattgagct gggcctccac  
 420  
 ccacatttaa tttccacaat aaatacggtc ttaaaaatgt ctagtatgac cagtgttcag  
 480  
 aagcaaagta ttctgtgtt gctggaaggc agagatgctc tcgtgagatc ccagacgggc  
 540  
 tcaggtaaaa ttcttgcccta ttgcatccct gtgggtccagt cccttcaagc aatggagtca  
 600  
 aaaatacagc gcagtgatgg cccctatgcc ctggtgctcg tgccaacgag agaggtaage  
 660  
 aggtccctt ttgggacaag ttttaagcac atgctttcat  
 700

<210> 2110

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2110

Xaa	Ala	Ser	Pro	Thr	Gln	Thr	Met	Ala	Ala	Ala	Asp	Gly	Ser	Leu	Phe
1				5				10						15	
Asp	Asn	Pro	Arg	Thr	Phe	Ser	Arg	Arg	Pro	Pro	Ala	Gln	Ala	Ser	Arg
		20					25					30			
Gln	Ala	Lys	Ala	Thr	Lys	Arg	Lys	Tyr	Gln	Ala	Ser	Ser	Glu	Ala	Pro
		35				40					45				
Pro	Ala	Lys	Arg	Arg	Asn	Glu	Thr	Ser	Phe	Leu	Pro	Ala	Lys	Lys	Thr
		50			55					60					
Ser	Val	Lys	Glu	Thr	Gln	Arg	Thr	Phe	Lys	Gly	Asn	Ala	Gln	Lys	Met
65					70				75					80	
Phe	Ser	Pro	Lys	Lys	His	Ser	Val	Ser	Thr	Ser	Asp	Arg	Asn	Gln	Glu
				85				90					95		
Glu	Arg	Gln	Cys	Ile	Lys	Thr	Ser	Ser	Leu	Phe	Lys	Asn	Asn	Pro	Asp
			100				105					110			
Ile	Pro	Glu	Leu	His	Arg	Pro	Val	Val	Lys	Gln	Val	Gln	Glu	Lys	Val
		115				120					125				
Phe	Thr	Ser	Ala	Ala	Phe	His	Glu	Leu	Gly	Leu	His	Pro	His	Leu	Ile
		130			135					140					
Ser	Thr	Ile	Asn	Thr	Val	Leu	Lys	Met	Ser	Ser	Met	Thr	Ser	Val	Gln
145				150					155					160	
Lys	Gln	Ser	Ile	Pro	Val	Leu	Leu	Glu	Gly	Arg	Asp	Ala	Leu	Val	Arg
			165					170					175		
Ser	Gln	Thr	Gly	Ser	Gly	Lys	Ile	Leu	Ala	Tyr	Cys	Ile	Pro	Val	Val
		180				185						190			
Gln	Ser	Leu	Gln	Ala	Met	Glu	Ser	Lys	Ile	Gln	Arg	Ser	Asp	Gly	Pro
	195					200					205				
Tyr	Ala	Leu	Val	Leu	Val	Pro	Thr	Arg	Glu	Val	Ser	Arg	Leu	Pro	Phe
210					215						220				
Gly	Thr	Ser	Phe	Lys	His	Met	Leu	Ser							
225					230										

<210> 2111  
 <211> 339  
 <212> DNA  
 <213> Homo sapiens

<400> 2111  
 acgcgttggtg cgggcccgga cccgatcatc gctgcccagc gtttcggtgc ggtttccgat  
 60  
 caaatggaaa tcacccgcaa ggctctgaaa aagcacggtc ggggcaacaa gctggcaatt  
 120  
 gccgagctgg tggccctggc tgagctgttc atgccaatca agctggtgcc gaagcaattt  
 180  
 gaaggcctgg ttgagcgtgt gcgcagtgtc cttgagcgtc tgcgtgcca agagcgcgca  
 240  
 atcatgcagc tctgcgtacg tgatgcacgc atgccgcgtg ccgacttcct gcgccagttt  
 300  
 ccgggcaacg aagtggatga aagctggacc gacgcactg  
 339

<210> 2112  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 2112  
 Thr Arg Cys Ala Gly Pro Asp Pro Ile Ile Ala Ala Gln Arg Phe Gly  
 1 5 10 15  
 Ala Val Ser Asp Gln Met Glu Ile Thr Arg Lys Ala Leu Lys Lys His  
 20 25 30  
 Gly Arg Gly Asn Lys Leu Ala Ile Ala Glu Leu Val Ala Leu Ala Glu  
 35 40 45  
 Leu Phe Met Pro Ile Lys Leu Val Pro Lys Gln Phe Glu Gly Leu Val  
 50 55 60  
 Glu Arg Val Arg Ser Ala Leu Glu Arg Leu Arg Ala Gln Glu Arg Ala  
 65 70 75 80  
 Ile Met Gln Leu Cys Val Arg Asp Ala Arg Met Pro Arg Ala Asp Phe  
 85 90 95  
 Leu Arg Gln Phe Pro Gly Asn Glu Val Asp Glu Ser Trp Thr Asp Ala  
 100 105 110  
 Leu

<210> 2113  
 <211> 2329  
 <212> DNA  
 <213> Homo sapiens

<400> 2113  
 nnatacaaaa agcttttcat gtttgaacgt gttcaccatg gcgaggagct ccacatgccc  
 60  
 atcacagtaa tctggggcgt gtccccagaa gacaatggca acccactaaa tccaagagt  
 120  
 aaagggaagt tgacattaga tagcagtttt aacatcgcca gccagcttc ccaggcctgg  
 180

attttgcaact tctgtcaaaa actgagaaac caaacattct tttaccagac tgatgaacag  
 240  
 gacttcacca gctgcttcat tgagacattc aaacagtggg tggaaaacca ggactgtgat  
 300  
 gagcctgccc tgtacccatg ctgcagccac tggagcttcc cctacaagca agagattttt  
 360  
 gaactgtgca tcaagagagc tatcatggag ctggaaaagg gtacagggtg ccatttggat  
 420  
 agcaaaaccc cagggccgag gtttgatata aatgatacta tcagggcagt ggtgttagag  
 480  
 ttccagagta cctacctctt cacactggct tatgaaaaga tgcacagtt ttataaagag  
 540  
 gtggactcgt ggatatccag tgagctgagt tcggccctcg aaggcctcag caatggttgg  
 600  
 tttgtcagca atctggagtt ctatgacctc caggatagcc tctccgatgg caccctcatt  
 660  
 gccatggggc tgtcagttgc tgttgcatth agcgtgatgc tgctgacaac ttggaacatc  
 720  
 atcataagcc tttatgccat catttcaatt gctggaacga tatttgtcac tgttggttct  
 780  
 cttgtcctgc tgggctggga gctcaatgtg ttggaatctg tcaccatttc ggttgccgtc  
 840  
 ggcttgtctg tagactttgc cgtccattat ggggttgctt accgcttggc tccagatccc  
 900  
 gaccgagaag gcaaagtgat cttctctctg agtcgctggg gctctgcgat ggccatggct  
 960  
 gccctgacca ccttcgtggc aggggccatg atgattccct ccacagttct agcttacacc  
 1020  
 cagctgggca ccttcatgat gctcatcatg tgtatcagtt gggctttcgc caccctcttt  
 1080  
 ttccagtga tgtgccgggtg ccttggacca caggggtacct gtggtcagat tcttttacct  
 1140  
 aaaaaactac agtgagtgcc cttttcccat gccttgtcta caagtcccag tgacaaggga  
 1200  
 caaagcaaaa cacataccat aaatgcttat catttagatc ccagggggccc aaaatctgaa  
 1260  
 ctggagcatg agttttatga attagaacct ctggcttccc acagctgcac tgcccttgag  
 1320  
 aagaccactt atgaagagac ccacatctgc tctgaatttt tcaacagcca agcaaagaat  
 1380  
 ttagggatgc ctgtgcatgc agcttacaac agtgaactca gcaaaagcac tgaaagtga  
 1440  
 actggctctg ccttgttaca gccccctctt gaacagcata ccgtgtgtca cttcttctct  
 1500  
 ctgaatcaga gatgtagctg ccccgatgcc taaaaact tgaactatgg cccacactct  
 1560  
 tgccagcaga tgggggactg cttgtgccac cagtgtcttc ctaccactag cagctttgtc  
 1620  
 cagatccaaa acggcgctggc acctctgaag gccacacacc aagctgtcga gggctttgtg  
 1680  
 caccctcatc cgcacatcca cactgtccc tgctgcagg gcagagtaaa gccagccgga  
 1740  
 atgcagaatt ctctgcctag gaatttttct ctcacccag tgcagcacat tcaggcccaa  
 1800



```
<210> 2114
<211> 758
<212> PRT
<213> Homo sapiens
```

Xaa	Tyr	Lys	Lys	Leu	Phe	Met	Phe	Glu	Arg	Val	His	His	Gly	Glu	Glu
1				5					10					15	
Leu	His	Met	Pro	Ile	Thr	Val	Ile	Trp	Gly	Val	Ser	Pro	Glu	Asp	Asn
			20					25					30		
Gly	Asn	Pro	Leu	Asn	Pro	Lys	Ser	Lys	Gly	Lys	Leu	Thr	Leu	Asp	Ser
		35					40					45			
Ser	Phe	Asn	Ile	Ala	Ser	Pro	Ala	Ser	Gln	Ala	Trp	Ile	Leu	His	Phe
	50					55					60				
Cys	Gln	Lys	Leu	Arg	Asn	Gln	Thr	Phe	Phe	Tyr	Gln	Thr	Asp	Glu	Gln
65					70					75					80
Asp	Phe	Thr	Ser	Cys	Phe	Ile	Glu	Thr	Phe	Lys	Gln	Trp	Met	Glu	Asn
				85					90					95	
Gln	Asp	Cys	Asp	Glu	Pro	Ala	Leu	Tyr	Pro	Cys	Cys	Ser	His	Trp	Ser
			100					105					110		
Phe	Pro	Tyr	Lys	Gln	Glu	Ile	Phe	Glu	Leu	Cys	Ile	Lys	Arg	Ala	Ile
		115					120					125			
Met	Glu	Leu	Glu	Arg	Ser	Thr	Gly	Tyr	His	Leu	Asp	Ser	Lys	Thr	Pro
	130					135					140				
Gly	Pro	Arg	Phe	Asp	Ile	Asn	Asp	Thr	Ile	Arg	Ala	Val	Val	Leu	Glu
145				150						155				160	
Phe	Gln	Ser	Thr	Tyr	Leu	Phe	Thr	Leu	Ala	Tyr	Glu	Lys	Met	His	Gln
				165					170					175	
Phe	Tyr	Lys	Glu	Val	Asp	Ser	Trp	Ile	Ser	Ser	Glu	Leu	Ser	Ser	Ala
			180					185					190		
Pro	Glu	Gly	Leu	Ser	Asn	Gly	Trp	Phe	Val	Ser	Asn	Leu	Glu	Phe	Tyr
	195					200					205				
Asp	Leu	Gln	Asp	Ser	Leu	Ser	Asp	Gly	Thr	Leu	Ile	Ala	Met	Gly	Leu
	210					215					220				
Ser	Val	Ala	Val	Ala	Phe	Ser	Val	Met	Leu	Leu	Thr	Thr	Trp	Asn	Ile

```

225          230          235          240
Ile Ile Ser Leu Tyr Ala Ile Ile Ser Ile Ala Gly Thr Ile Phe Val
          245          250          255
Thr Val Gly Ser Leu Val Leu Leu Gly Trp Glu Leu Asn Val Leu Glu
          260          265          270
Ser Val Thr Ile Ser Val Ala Val Gly Leu Ser Val Asp Phe Ala Val
          275          280          285
His Tyr Gly Val Ala Tyr Arg Leu Ala Pro Asp Pro Asp Arg Glu Gly
          290          295          300
Lys Val Ile Phe Ser Leu Ser Arg Val Gly Ser Ala Met Ala Met Ala
305          310          315          320
Ala Leu Thr Thr Phe Val Ala Gly Ala Met Met Ile Pro Ser Thr Val
          325          330          335
Leu Ala Tyr Thr Gln Leu Gly Thr Phe Met Met Leu Ile Met Cys Ile
          340          345          350
Ser Trp Ala Phe Ala Thr Phe Phe Phe Gln Cys Met Cys Arg Cys Leu
          355          360          365
Gly Pro Gln Gly Thr Cys Gly Gln Ile Pro Leu Pro Lys Lys Leu Gln
          370          375          380
Cys Ser Ala Phe Ser His Ala Leu Ser Thr Ser Pro Ser Asp Lys Gly
385          390          395          400
Gln Ser Lys Thr His Thr Ile Asn Ala Tyr His Leu Asp Pro Arg Gly
          405          410          415
Pro Lys Ser Glu Leu Glu His Glu Phe Tyr Glu Leu Glu Pro Leu Ala
          420          425          430
Ser His Ser Cys Thr Ala Pro Glu Lys Thr Thr Tyr Glu Glu Thr His
          435          440          445
Ile Cys Ser Glu Phe Phe Asn Ser Gln Ala Lys Asn Leu Gly Met Pro
          450          455          460
Val His Ala Ala Tyr Asn Ser Glu Leu Ser Lys Ser Thr Glu Ser Asp
465          470          475          480
Thr Gly Ser Ala Leu Leu Gln Pro Pro Leu Glu Gln His Thr Val Cys
          485          490          495
His Phe Phe Ser Leu Asn Gln Arg Cys Ser Cys Pro Asp Ala Tyr Lys
          500          505          510
His Leu Asn Tyr Gly Pro His Ser Cys Gln Gln Met Gly Asp Cys Leu
          515          520          525
Cys His Gln Cys Ser Pro Thr Ser Ser Phe Val Gln Ile Gln Asn
          530          535          540
Gly Val Ala Pro Leu Lys Ala Thr His Gln Ala Val Glu Gly Phe Val
545          550          555          560
His Pro Ile Thr His Ile His His Cys Pro Cys Leu Gln Gly Arg Val
          565          570          575
Lys Pro Ala Gly Met Gln Asn Ser Leu Pro Arg Asn Phe Phe Leu His
          580          585          590
Pro Val Gln His Ile Gln Ala Gln Glu Lys Ile Gly Lys Thr Asn Val
          595          600          605
His Ser Leu Gln Arg Ser Ile Glu Glu His Leu Pro Lys Met Ala Glu
          610          615          620
Pro Ser Ser Phe Val Cys Arg Ser Thr Gly Ser Leu Leu Lys Thr Cys
625          630          635          640
Cys Asp Pro Glu Asn Lys Gln Arg Glu Leu Cys Lys Asn Arg Asp Val
          645          650          655
Ser Asn Leu Glu Ser Ser Gly Gly Thr Glu Asn Lys Ala Gly Gly Lys

```

660                      665                      670  
 Val Glu Leu Ser Leu Ser Gln Thr Asp Ala Ser Val Asn Ser Glu His  
 675                      680                      685  
 Phe Asn Gln Asn Glu Pro Lys Val Leu Phe Asn His Leu Met Gly Glu  
 690                      695                      700  
 Ala Gly Cys Arg Ser Cys Pro Asn Asn Ser Gln Ser Cys Gly Arg Ile  
 705                      710                      715                      720  
 Val Arg Val Lys Cys Asn Ser Val Asp Cys Gln Met Pro Asn Met Glu  
 725                      730                      735  
 Ala Asn Val Pro Ala Val Leu Thr His Ser Glu Leu Ser Gly Glu Ser  
 740                      745                      750  
 Leu Leu Ile Lys Thr Leu  
 755

<210> 2115  
 <211> 461  
 <212> DNA  
 <213> Homo sapiens

<400> 2115  
 acgcgtctct ggccctgggag cgggctcccc cgacacgccca ccttccttgc cagatgggtgc  
 60  
 ttctgggtat tccagaatct ggaatggggg atgcctatcc ccctcctgag cccacctgct  
 120  
 ggtcttgggt ccttggagcc caccaagtcc acaaccacct gctctgaata gaaagctgac  
 180  
 attgaaccga acagccgcgt cggaggggga tatctgtgga gagctgtgac tgggagccgg  
 240  
 tgtgtgcctt tctgtggtca tttctcgagt cctctgccgg ctgctgccag gtgaaggcat  
 300  
 ctccatgccc agccgggtgg cagctggggc ggggtggacct ccagcttctg cccgacgggg  
 360  
 ttcagatgac cgagatccta cgggattgcc aatgtgtggg gacggggggc tttcaggggc  
 420  
 gggaaaacat gtcccatcc gtgggaagtg gagccacgtg g  
 461

<210> 2116  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 2116  
 Met Gly Thr Cys Phe Pro Ala Pro Glu Ser Pro Pro Ser Pro His Ile  
 1                      5                      10                      15  
 Gly Asn Pro Val Gly Ser Arg Ser Ser Glu Pro Arg Arg Ala Glu Ala  
 20                      25                      30  
 Gly Gly Pro Pro Ala Pro Ala Ala His Arg Leu Gly Met Glu Met Pro  
 35                      40                      45  
 Ser Pro Gly Ser Ser Arg Gln Arg Thr Arg Glu Met Thr Thr Glu Arg  
 50                      55                      60  
 His Thr Pro Ala Pro Ser His Ser Ser Pro Gln Ile Ser Pro Ser Asp  
 65                      70                      75                      80  
 Ala Ala Val Arg Phe Asn Val Ser Phe Leu Phe Arg Ala Gly Gly Cys

```

      85              90              95
Gly Leu Gly Gly Leu Gln Gly Pro Lys Thr Ser Arg Trp Ala Gln Glu
      100              105              110
Gly Asp Arg His Pro Pro Phe Gln Ile Leu Glu Tyr Pro Glu Ala Pro
      115              120              125
Ser Gly Arg Glu Gly Gly Val Ser Gly Glu Pro Ala Pro Arg Pro Glu
      130              135              140
Thr Arg
145

```

&lt;210&gt; 2117

&lt;211&gt; 360

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2117

```

nnacgcgttg gggagacgac ggtgaccttc ccagcaagct catcgagga tgaacaatc
60
cgcgccagcg ttaagacctt ctgcgggct gtcaccgccg atctggagaa gtgtggaccg
120
atcaggtgac actcgcggtg gactgaatag atgcctgagt ctgaagacac tgtgtggctg
180
acccaagagg ctttcgataa gtcacccag gagctggagt acctcaaagg cgaaggccgc
240
accgtcattg ccaacaagat tgccgacgcc cgttcggaag gcgacctttc tgagaacggc
300
ggctaccatg ccgccgtga ggagcagggg caggccgagg cccgcatccg tcaactcgag
360

```

&lt;210&gt; 2118

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2118

```

Met Pro Glu Ser Glu Asp Thr Val Trp Leu Thr Gln Glu Ala Phe Asp
1      5      10      15
Lys Leu Thr Gln Glu Leu Glu Tyr Leu Lys Gly Glu Gly Arg Thr Val
20      25      30
Ile Ala Asn Lys Ile Ala Asp Ala Arg Ser Glu Gly Asp Leu Ser Glu
35      40      45
Asn Gly Gly Tyr His Ala Ala Arg Glu Glu Gln Gly Gln Ala Glu Ala
50      55      60
Arg Ile Arg Gln Leu Glu
65      70

```

&lt;210&gt; 2119

&lt;211&gt; 465

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2119

```

naccgctgaa gggcgcggtg cgccctctca ctggcgagc ctgcactgcc gctgccgcct
60

```

cgccccgccc ttgccttggc gttgtctctg gcactgtggc ggactgacca cggccccgggc  
 120  
 atgggctgca agggagacgc gagcggagtt tgctataaaa tgggagttct ggttgactc  
 180  
 actgttctgt ggctgttctc ctcagtaaag gccgactcaa aagccattac aacctctctt  
 240  
 acaacaaaat gggtttccac tccattgttg ttagaagcca gtgagttttt agcagaagac  
 300  
 agtcaagaga aattttggaa tttttagtaa gccagtcaaa atattggatc atcagatcat  
 360  
 gacggtagcg attattccta ctatcatgca atattggagg ctgcatttca gtttctgtca  
 420  
 cccctccagc agaatttggt taaatttggc ctgtcccttc acgcg  
 465

<210> 2120  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 2120  
 Met Gly Cys Lys Gly Asp Ala Ser Gly Val Cys Tyr Lys Met Gly Val  
 1 5 10 15  
 Leu Val Val Leu Thr Val Leu Trp Leu Phe Ser Ser Val Lys Ala Asp  
 20 25 30  
 Ser Lys Ala Ile Thr Thr Ser Leu Thr Thr Lys Trp Phe Ser Thr Pro  
 35 40 45  
 Leu Leu Leu Glu Ala Ser Glu Phe Leu Ala Glu Asp Ser Gln Glu Lys  
 50 55 60  
 Phe Trp Asn Phe Val Glu Ala Ser Gln Asn Ile Gly Ser Ser Asp His  
 65 70 75 80  
 Asp Gly Thr Asp Tyr Ser Tyr Tyr His Ala Ile Leu Glu Ala Ala Phe  
 85 90 95  
 Gln Phe Leu Ser Pro Leu Gln Gln Asn Leu Phe Lys Phe Cys Leu Ser  
 100 105 110  
 Leu His Ala  
 115

<210> 2121  
 <211> 336  
 <212> DNA  
 <213> Homo sapiens

<400> 2121  
 ccggacaagg tcaatggaat gaaaacctcc cggccgacag acaatagtat aaatgttaca  
 60  
 tgtggctctc cttatgaaac taatggccct aaaacctttt acattttggt agtcagaagt  
 120  
 ggaggttctt ttgttacaaa atacaacaag acaaactgtc agttttatgt agataatctc  
 180  
 tactattcaa ctgactatga gtttctggtc tcttttcaca atggagtgtc cgagggagat  
 240  
 tcagttataa gaaatgagtc aacaaatttt aatgctaaag ccttgattat attcctggtg  
 300

tttctgatta ttgtgacatc aatagccttg cttggt  
336

<210> 2122  
<211> 112  
<212> PRT  
<213> Homo sapiens

<400> 2122  
Pro Asp Lys Val Asn Gly Met Lys Thr Ser Arg Pro Thr Asp Asn Ser  
1 5 10 15  
Ile Asn Val Thr Cys Gly Pro Pro Tyr Glu Thr Asn Gly Pro Lys Thr  
20 25 30  
Phe Tyr Ile Leu Val Val Arg Ser Gly Gly Ser Phe Val Thr Lys Tyr  
35 40 45  
Asn Lys Thr Asn Cys Gln Phe Tyr Val Asp Asn Leu Tyr Tyr Ser Thr  
50 55 60  
Asp Tyr Glu Phe Leu Val Ser Phe His Asn Gly Val Tyr Glu Gly Asp  
65 70 75 80  
Ser Val Ile Arg Asn Glu Ser Thr Asn Phe Asn Ala Lys Ala Leu Ile  
85 90 95  
Ile Phe Leu Val Phe Leu Ile Ile Val Thr Ser Ile Ala Leu Leu Val  
100 105 110

<210> 2123  
<211> 426  
<212> DNA  
<213> Homo sapiens

<400> 2123  
aactgggccc agttcggcaa cctgcacccc ttgcgcccg cagagcaaag cgctgggttat  
60  
cagcaactga cgcacgaact ggaagcgatg ctctgcgccg ccacagggtta tgacgcgatc  
120  
tccctgcagc cgaacgctgg ctcccagggc gagtacgccg gtctgctggc gatccgcgct  
180  
taccaccaga gccgtggcga tgagcgctgc gacatctgcc tgattccgtc ctctgccac  
240  
ggcaccaacc cggcaaccgc caacatggcc ggcacgcgcg tggtcgtgac cgcttgcgac  
300  
gcccgcgcca acgtcgacat cgaagacctg cgcgccaagg ctatcgagca ccgcgaacac  
360  
ctcgcggcgc tgatgatcac ctaccgctcg acccacggcg tgttcgaaga aggcacccgc  
420  
gagatc  
426

<210> 2124  
<211> 142  
<212> PRT  
<213> Homo sapiens

<400> 2124  
Asn Trp Ala Glu Phe Gly Asn Leu His Pro Phe Ala Pro Ala Glu Gln

```

      1           5           10           15
Ser Ala Gly Tyr Gln Gln Leu Thr Asp Glu Leu Glu Ala Met Leu Cys
      20           25           30
Ala Ala Thr Gly Tyr Asp Ala Ile Ser Leu Gln Pro Asn Ala Gly Ser
      35           40           45
Gln Gly Glu Tyr Ala Gly Leu Leu Ala Ile Arg Ala Tyr His Gln Ser
      50           55           60
Arg Gly Asp Glu Arg Arg Asp Ile Cys Leu Ile Pro Ser Ser Ala His
      65           70           75           80
Gly Thr Asn Pro Ala Thr Ala Asn Met Ala Gly Met Arg Val Val Val
      85           90           95
Thr Ala Cys Asp Ala Arg Gly Asn Val Asp Ile Glu Asp Leu Arg Ala
      100          105          110
Lys Ala Ile Glu His Arg Glu His Leu Ala Ala Leu Met Ile Thr Tyr
      115          120          125
Pro Ser Thr His Gly Val Phe Glu Glu Gly Ile Arg Glu Ile
      130          135          140

```

&lt;210&gt; 2125

&lt;211&gt; 285

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2125

```

ngtatggcat ctgctgcttc aagttttgtg gtgacaccaa atgtcacttc taacacaacc
60
acagtcaagc ccaatatggt tatgttacct attcaaaaca caagagggtc aagattgggtt
120
ctaaaggcgg ctgaagacgc ggcaccaccg gctgtcaccg ttgaagcggc caaggaagag
180
aagccgaagc caccaccaat tggacctaag agaggagcca aggtgagaat tcttaggaag
240
gagtcatact ggttcaaagg agtgggatca gttgtgactg ttgat
285

```

&lt;210&gt; 2126

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2126

```

Xaa Met Ala Ser Ala Ala Ser Ser Phe Val Val Thr Pro Asn Val Thr
1           5           10           15
Ser Asn Thr Thr Thr Val Lys Pro Asn Met Val Met Leu Pro Ile Gln
      20           25           30
Asn Thr Arg Gly Ser Arg Leu Val Leu Lys Ala Ala Glu Asp Ala Ala
      35           40           45
Pro Pro Ala Val Thr Val Glu Ala Ala Lys Glu Glu Lys Pro Lys Pro
      50           55           60
Pro Pro Ile Gly Pro Lys Arg Gly Ala Lys Val Arg Ile Leu Arg Lys
      65           70           75           80
Glu Ser Tyr Trp Phe Lys Gly Val Gly Ser Val Val Thr Val Asp
      85           90           95

```

<210> 2127  
 <211> 454  
 <212> DNA  
 <213> Homo sapiens

<400> 2127  
 atggcagcca agatgcttgc attgttcgct ctctagctc tttgtgcaag cgccactagt  
 60  
 ggcagcgata ttccagggca cttgtcacca gtcatgccat tgggtaccat gaacccatgc  
 120  
 atgcagtact gcatgatgca acaggggctt gccagcttga tggcgtgtcc gtccctgatg  
 180  
 ctgcagcaac tgttggcctt accgcttcag acgatgccag tgatgatgcc acagatgatg  
 240  
 acgcctaaca tgatgtcacc attgatgatg ccgagcatga tgtcaccaat ggtcttgccg  
 300  
 agcatgatgt cgcaaatgat gatgccacaa tgtcactgcg acgcctctc gcagattatg  
 360  
 ctgcaacagc agttaccatt catgttcaac ccaatggcca tgacgattcc acccatgttc  
 420  
 ttacagcaac cctttgttgg tgctgcattc taga  
 454

<210> 2128  
 <211> 150  
 <212> PRT  
 <213> Homo sapiens

<400> 2128  
 Met Ala Ala Lys Met Leu Ala Leu Phe Ala Leu Leu Ala Leu Cys Ala  
 1 5 10 15  
 Ser Ala Thr Ser Ala Thr His Ile Pro Gly His Leu Ser Pro Val Met  
 20 25 30  
 Pro Leu Gly Thr Met Asn Pro Cys Met Gln Tyr Cys Met Met Gln Gln  
 35 40 45  
 Gly Leu Ala Ser Leu Met Ala Cys Pro Ser Leu Met Leu Gln Gln Leu  
 50 55 60  
 Leu Ala Leu Pro Leu Gln Thr Met Pro Val Met Met Pro Gln Met Met  
 65 70 75 80  
 Thr Pro Asn Met Met Ser Pro Leu Met Met Pro Ser Met Met Ser Pro  
 85 90 95  
 Met Val Leu Pro Ser Met Met Ser Gln Met Met Met Pro Gln Cys His  
 100 105 110  
 Cys Asp Ala Val Ser Gln Ile Met Leu Gln Gln Gln Leu Pro Phe Met  
 115 120 125  
 Phe Asn Pro Met Ala Met Thr Ile Pro Pro Met Phe Leu Gln Gln Pro  
 130 135 140  
 Phe Val Gly Ala Ala Phe  
 145 150

<210> 2129  
 <211> 354  
 <212> DNA  
 <213> Homo sapiens



&lt;400&gt; 2129

acgcgtgact tggatgaacaa acccatatcc atcaccacct tcggtgttga tacggaaata  
 60  
 ctcacgcctt ttgacaagcg gcgtgatgag aacggcggtg acgggggtgt gcgcacggg  
 120  
 actatcaagg ctctccactc caaatatggg atcgggtgaac tcatccgtgc cttcagtcgg  
 180  
 gtccatgatg aacggcctaa taccgtcctt cgtatctggg gcggcggccc agacgagaat  
 240  
 cccctcaagg tcttggtctg ccgtcttgtc ccggacgggt cgggtggagt tcgcggtgcc  
 300  
 attgatcatt ctgaggtcag aaatgccttg ggtagtttgg acatctttgc cgcc  
 354

&lt;210&gt; 2130

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2130

Thr	Arg	Asp	Leu	Val	Asn	Lys	Pro	Ile	Ser	Ile	Thr	Pro	Phe	Gly	Val
1			5					10					15		
Asp	Thr	Glu	Ile	Leu	Thr	Pro	Phe	Asp	Lys	Arg	Arg	Asp	Ala	Asn	Gly
	20						25					30			
Gly	Asp	Gly	Val	Val	Arg	Ile	Gly	Thr	Ile	Lys	Ala	Leu	His	Ser	Lys
	35					40					45				
Tyr	Gly	Ile	Gly	Glu	Leu	Ile	Arg	Ala	Phe	Ser	Arg	Val	His	Asp	Glu
	50				55				60						
Arg	Pro	Asn	Thr	Val	Leu	Arg	Ile	Trp	Gly	Gly	Gly	Pro	Asp	Glu	Asn
65				70					75				80		
Pro	Leu	Lys	Val	Leu	Ala	Arg	Arg	Leu	Val	Pro	Asp	Gly	Ser	Val	Glu
		85					90				95				
Phe	Arg	Gly	Ala	Ile	Asp	His	Ser	Glu	Val	Arg	Asn	Ala	Leu	Gly	Ser
	100						105					110			
Leu	Asp	Ile	Phe	Ala	Ala										
		115													

&lt;210&gt; 2131

&lt;211&gt; 324

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2131

gcacgcggc cattgggttat gtgtgcctat tccattggtt atgtggaagg ttgggatcag  
 60  
 ccagacagtc attatgatgg ttgtttacag ctgggcgagt ggggcttttc aatcaatgac  
 120  
 ctgatgaaga cggtagaggg gcgggcaggg tgcattgagt attatgaaat gctcaacgaa  
 180  
 caacgccccg acttgtctta tgacatagac ggtattgttt ataaagttga tcagattgac  
 240  
 ctgcaagaag agcttggttt tattgctcgt gcgccacgct gggcaattgc tcgaaaattt  
 300

cctgctcaag aagaagttac gcgt  
324

<210> 2132  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2132  
Ala Ser Arg Pro Leu Val Met Cys Ala Tyr Ser Ile Gly Tyr Val Glu  
1 5 10 15  
Gly Trp Asp Gln Pro Asp Ser His Tyr Asp Gly Leu Leu Gln Leu Gly  
20 25 30  
Glu Trp Gly Phe Arg Ile Asn Asp Leu Met Lys Thr Val Glu Gly Ala  
35 40 45  
Ala Gly Cys Ile Glu Tyr Tyr Glu Met Leu Asn Glu Gln Arg Pro Asp  
50 55 60  
Leu Ser Tyr Asp Ile Asp Gly Ile Val Tyr Lys Val Asp Gln Ile Asp  
65 70 75 80  
Leu Gln Glu Glu Leu Gly Phe Ile Ala Arg Ala Pro Arg Trp Ala Ile  
85 90 95  
Ala Arg Lys Phe Pro Ala Gln Glu Glu Val Thr Arg  
100 105

<210> 2133  
<211> 292  
<212> DNA  
<213> Homo sapiens

<400> 2133  
ggtacctgca atatgggtatt gcatgacatg aataaatttt tccttactct gaactcacta  
60  
gtggctgtct ttagaggacc cggcgaactt ttctgtcttt tteccacttg ctccatcaca  
120  
tacatcacat caccaacacc catcacatac atacacagtc atgaacggcc atcaggccac  
180  
accagattac atcgtgtgtg atccaacct gcattttcct gccctcctt tactgcgagt  
240  
gtcacctcta cccggaaagg tcttcaacct ccaagtttcc cagtaattta tt  
292

<210> 2134  
<211> 93  
<212> PRT  
<213> Homo sapiens

<400> 2134  
Met Val Leu His Asp Met Asn Lys Phe Phe Leu Thr Leu Asn Ser Leu  
1 5 10 15  
Val Ala Val Phe Arg Gly Pro Gly Glu Leu Phe Leu Leu Phe Pro Thr  
20 25 30  
Cys Ser Ile Thr Tyr Ile Thr Ser Pro Thr Pro Ile Thr Tyr Ile His  
35 40 45  
Ser His Glu Arg Pro Ser Gly His Thr Arg Leu His Arg Cys Gly Ser

50		55		60											
Asn	Pro	Ala	Phe	Ser	Cys	Pro	Ser	Phe	Thr	Ala	Ser	Val	Thr	Ser	Thr
65				70					75					80	
Arg	Lys	Gly	Leu	Gln	Pro	Pro	Ser	Phe	Pro	Val	Ile	Tyr			
			85						90						

<210> 2135  
 <211> 439  
 <212> DNA  
 <213> Homo sapiens

<400> 2135  
 acgcgttcca ttggtgtgtc gaatttcaag accgagcatc tggacgccat cgagggggcc  
 60  
 actccgagcg tcgaccaaact cgagatgcat ccctcgttca accaggcgac cttccgcgca  
 120  
 gagctggccg agcgcggcat taaccggag gcttgagacc cgctgggcca gtcgaaggac  
 180  
 ctcgacaatc ccgtcctcac cgatatttcc aaggcgactg gaaagacgcc tgcccagggtg  
 240  
 gtcattcgct ggcacctgca gatcggcaac gtggtattcc ccaagtcggt gacaccatca  
 300  
 cgaattgccg agaactttga tgtgttcgat ttcgagctgt ctgacgagca gatcgccgca  
 360  
 attgatggcc tggatcacgg caacaggctc ggtggtgacc cttctaccgc cgacttctga  
 420  
 ttctgcaaca ataaccggt  
 439

<210> 2136  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2136  
 Thr Arg Ser Ile Gly Val Ser Asn Phe Lys Thr Glu His Leu Asp Ala  
 1 5 10 15  
 Ile Glu Gly Ala Thr Pro Ser Val Asp Gln Ile Glu Met His Pro Ser  
 20 25 30  
 Phe Asn Gln Ala Thr Phe Arg Ala Glu Leu Ala Glu Arg Gly Ile Asn  
 35 40 45  
 Pro Glu Ala Trp Ser Pro Leu Gly Gln Ser Lys Asp Leu Asp Asn Pro  
 50 55 60  
 Val Leu Thr Asp Ile Ser Lys Ala Thr Gly Lys Thr Pro Ala Gln Val  
 65 70 75 80  
 Val Ile Arg Trp His Leu Gln Ile Gly Asn Val Val Phe Pro Lys Ser  
 85 90 95  
 Val Thr Pro Ser Arg Ile Ala Glu Asn Phe Asp Val Phe Asp Phe Glu  
 100 105 110  
 Leu Ser Asp Glu Gln Ile Ala Ala Ile Asp Gly Leu Asp His Gly Asn  
 115 120 125  
 Arg Leu Gly Gly Asp Pro Ser Thr Ala Asp Phe  
 130 135

<210> 2137  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 2137  
 nncctttgcc ttggtgata ccctcaccac ctgggaacat cccccagaca ccctcttaac  
 60  
 tccgggacag agatggctgg cggagcctgg ggccgcctgg cctgttactt ggagttcctg  
 120  
 aagaaggagg agctgaagga gttccagctt ctgctcgcca ataaagcgca ctccaggagc  
 180  
 tcttccgggtg agacacccgc tcagccagag aagacgagtg gcatggaggt gccctcgtac  
 240  
 ctggtggctc agtatgggga gcagcggggc tgggacctag ccctccatac ctgggagcag  
 300  
 atggggctga ggtcactgtg cgccaagcc  
 330

<210> 2138  
 <211> 86  
 <212> PRT  
 <213> Homo sapiens

<400> 2138  
 Met Ala Gly Gly Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu  
 1 5 10 15  
 Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Leu Ala Asn Lys Ala  
 20 25 30  
 His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr  
 35 40 45  
 Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln  
 50 55 60  
 Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg  
 65 70 75 80  
 Ser Leu Cys Ala Gln Ala  
 85

<210> 2139  
 <211> 433  
 <212> DNA  
 <213> Homo sapiens

<400> 2139  
 gagcagttga gcgcccagaa caccgggatc aacagcaacc tgtcggacat ggccggccag  
 60  
 gtgaacaagc tggcgagtac catcgcccag tacaacgata agatttcaa agtcaccacc  
 120  
 gccgcccgtg ccccgaaaga cctgctggac cagcgcagcg aggcggtgcg ccagttgtcc  
 180  
 gagctggtcg ggacccaggt ggtccagcgc ggttcgagtt atgacgtcta tatcggcagc  
 240  
 ggtcagcgcc tggatgatgg caacagcacc aacaccctgt ccgcagtgcc gagcaaggac  
 300

gacccgagcc agtcggcctt gcagctggat cgcggcacca gcaccgtcga taccacctcc  
 360  
 acggtgaccg gtggcgagat cggtaggtctg ctgcgctatc gcagcgatgt gctcgacccg  
 420  
 tcgatcaacg cgt  
 433

<210> 2140  
 <211> 144  
 <212> PRT  
 <213> Homo sapiens

<400> 2140  
 Glu Gln Leu Ser Ala Gln Asn Thr Gly Ile Asn Ser Asn Leu Ser Asp  
 1 5 10 15  
 Met Ala Gly Gln Val Asn Lys Leu Ala Ser Thr Ile Ala Gln Tyr Asn  
 20 25 30  
 Asp Gln Ile Ser Lys Val Thr Thr Ala Ala Gly Ala Pro Asn Asp Leu  
 35 40 45  
 Leu Asp Gln Arg Ser Glu Ala Val Arg Gln Leu Ser Glu Leu Val Gly  
 50 55 60  
 Thr Gln Val Val Gln Arg Gly Ser Ser Tyr Asp Val Tyr Ile Gly Ser  
 65 70 75 80  
 Gly Gln Arg Leu Val Met Gly Asn Ser Thr Asn Thr Leu Ser Ala Val  
 85 90 95  
 Pro Ser Lys Asp Asp Pro Ser Gln Ser Ala Leu Gln Leu Asp Arg Gly  
 100 105 110  
 Thr Ser Thr Val Asp Ile Thr Ser Thr Val Thr Gly Gly Glu Ile Gly  
 115 120 125  
 Gly Leu Leu Arg Tyr Arg Ser Asp Val Leu Asp Pro Ser Ile Asn Ala  
 130 135 140

<210> 2141  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

<400> 2141  
 nnatatccat gcagcgatcc tcatcaattt gctgtgttat taggctttgg tgcgacggct  
 60  
 gtttatccctt atctttcttt ccgcttgatc aatgatattg tggataaagg cgaagtgtta  
 120  
 ggtgacccaa ttgcttgta tgttaaataat cgtaaaggta ttaacaaagg cttgatgaaa  
 180  
 atcctgtcta aaatgggtat ttcaacgatt gcctcttata gtggtgcgca attgtttgaa  
 240  
 gcggttggtt tggataactaa agtgggtcgac ctttggttca aaggcgttgc aagtcgtatc  
 300  
 aaagggtgctc gttttgaaga tttccagcgt gatcaagcaa cgattgccaa taatgcttgg  
 360  
 aagttacgta aacctattca acagggcggg tatcttaaat acgtacatga ctctgagtat  
 420  
 cacgcg  
 426

<210> 2142  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 2142  
 Xaa Tyr Pro Cys Ser Asp Pro His Gln Phe Ala Val Leu Leu Gly Phe  
 1 5 10 15  
 Gly Ala Thr Ala Val Tyr Pro Tyr Leu Ser Phe Arg Leu Ile Asn Asp  
 20 25 30  
 Met Val Asp Lys Gly Glu Val Leu Gly Asp Pro Ile Ala Cys His Val  
 35 40 45  
 Lys Tyr Arg Lys Gly Ile Asn Lys Gly Leu Met Lys Ile Leu Ser Lys  
 50 55 60  
 Met Gly Ile Ser Thr Ile Ala Ser Tyr Arg Gly Ala Gln Leu Phe Glu  
 65 70 75 80  
 Ala Val Gly Leu Asp Thr Lys Val Val Asp Leu Cys Phe Lys Gly Val  
 85 90 95  
 Ala Ser Arg Ile Lys Gly Ala Arg Phe Glu Asp Phe Gln Arg Asp Gln  
 100 105 110  
 Ala Thr Ile Ala Asn Asn Ala Trp Lys Leu Arg Lys Pro Ile Gln Gln  
 115 120 125  
 Gly Gly Tyr Leu Lys Tyr Val His Asp Ser Glu Tyr His Ala  
 130 135 140

<210> 2143  
 <211> 1008  
 <212> DNA  
 <213> Homo sapiens

<400> 2143  
 gccggcttga caagcatgtt caccggtgac gctgtcgtga tcgtcgaggt gagccaattg  
 60  
 tgtcatattg tacgcagtat gtcttttcaa cgattcttgg cgggggtggc agccatcttg  
 120  
 cttctcctgc ctactgcgtg cgctgatgat gcgcaggcgc ccgttggtcga taacctcggg  
 180  
 acggtcctca gcccctccaa ctccttcatt cgcgagccgg cgaattcgtc agtcaacggg  
 240  
 acgctcaaga gcacatatga gtacctcgg ctcacgcacg gtcacgatct acccgacgac  
 300  
 gatggctacg ctcatgatca tctggtcgcg gctttgcgcc cgtatttggt gaatggtgga  
 360  
 gacagtcggc aggccacgt cacccaactc atggcggcgt catccctgaa aacctcaac  
 420  
 gcgttgctcg acaaggagag atcagaggtc gacaaacgta cccgcctgcc gaagggtg  
 480  
 atcacgagaa agacggtgat gacggatctg cccatcgcca cgatgaggcg ggagatcggc  
 540  
 ctgtccaacg acgggttggt cctcacaccg tggaaggcca agacgacttc ttccgaggag  
 600  
 gtcgggtggg cgatgcaggc gctggccagt gccgacctat tcagcaatgc taaggacgcc  
 660

gagaaatggg ggtgggagtc gatctcggac gggatatttgc gccatctcga gacctacagt  
 720  
 ggccccgagta cgactatcgc gatggccttg tcggcggcga ataccgtctc tacattgtct  
 780  
 cgttcccagt tgcaacgcat cggcgacagt ctgcgggatg cgccatatcc gaggaaggac  
 840  
 cttggtcgg cgctcattcg caatggaaag cgggtcaagg acaagtgcag tatcgaatcg  
 900  
 gcgtacctgt tgaggatttc cgggaattgg gcgtggtgac atgacggttt cttggcaagg  
 960  
 tgtgaccaag acattcccct cgggcgattc cgcgcgtggg ggggtgcac  
 1008

<210> 2144

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2144

Met	Phe	Thr	Gly	Asp	Ala	Val	Val	Ile	Val	Glu	Val	Ser	Gln	Leu	Cys
1				5					10					15	
His	Ile	Val	Arg	Ser	Met	Ser	Phe	Gln	Arg	Phe	Leu	Ala	Gly	Val	Ala
			20					25					30		
Ala	Ile	Leu	Leu	Leu	Leu	Pro	Thr	Ala	Cys	Ala	Asp	Asp	Ala	Gln	Ala
		35					40					45			
Pro	Val	Val	Asp	Asn	Leu	Gly	Thr	Val	Leu	Ser	Pro	Ser	Asn	Ser	Leu
	50				55					60					
Ile	Arg	Glu	Pro	Ala	Asn	Ser	Ser	Val	Asn	Gly	Thr	Leu	Lys	Ser	Thr
65					70					75				80	
Tyr	Glu	Tyr	Leu	Arg	Leu	Ile	Asp	Gly	His	Asp	Leu	Pro	Asp	Asp	Asp
				85					90				95		
Gly	Tyr	Ala	His	Asp	His	Leu	Val	Ala	Ala	Leu	Arg	Pro	Tyr	Leu	Val
			100					105					110		
Asn	Gly	Gly	Asp	Ser	Arg	Gln	Ala	His	Val	Thr	Gln	Leu	Met	Ala	Ala
		115					120					125			
Ser	Ser	Leu	Lys	Thr	Leu	Asn	Ala	Leu	Ser	Asp	Lys	Glu	Arg	Ser	Glu
	130					135					140				
Val	Asp	Lys	Arg	Thr	Arg	Leu	Pro	Lys	Gly	Cys	Ile	Thr	Arg	Lys	Thr
145					150					155					160
Val	Met	Thr	Asp	Leu	Pro	Ile	Ala	Thr	Met	Arg	Arg	Glu	Ile	Gly	Leu
				165				170						175	
Ser	Asn	Asp	Gly	Leu	Cys	Leu	Thr	Pro	Trp	Lys	Val	Lys	Thr	Thr	Ser
		180						185					190		
Ser	Glu	Glu	Ala	Arg	Trp	Ala	Met	Gln	Ala	Leu	Ala	Ser	Ala	Asp	Leu
	195						200					205			
Phe	Ser	Asn	Ala	Lys	Asp	Ala	Glu	Lys	Trp	Gly	Trp	Glu	Ser	Ile	Ser
	210					215					220				
Asp	Gly	Tyr	Leu	Arg	His	Leu	Glu	Thr	Tyr	Ser	Gly	Pro	Ser	Thr	Thr
225					230					235					240
Ile	Ala	Met	Ala	Leu	Ser	Ala	Ala	Asn	Thr	Val	Ser	Thr	Leu	Ser	Arg
				245					250					255	
Ser	Gln	Leu	Gln	Arg	Ile	Gly	Asp	Ser	Leu	Ala	Asp	Ala	Pro	Tyr	Pro
		260					265						270		
Arg	Lys	Asp	Leu	Gly	Pro	Ala	Leu	Ile	Arg	Asn	Gly	Lys	Pro	Val	Lys

275                      280                      285  
 Asp Lys Cys Ser Ile Glu Ser Ala Tyr Leu Leu Arg Tyr Ser Gly Asn  
 290                      295                      300  
 Trp Ala Trp  
 305

<210> 2145  
 <211> 389  
 <212> DNA  
 <213> Homo sapiens

<400> 2145  
 tctagaatcg tgtataacat tctacacaat aagctaagcc tactcttgta gagtgcgac  
 60  
 atgacaaccc ttgaacaatc attatctcaa attcccgcac tttcgattat tcatgaacat  
 120  
 ttatttagct cggcccagcc ttctgctgaa caactaaaat tgattaaaga gtttggttgt  
 180  
 agcacagtca ttaaccttgc ttaactaat gcttcaaadc atcttgagaa tgaagaccgt  
 240  
 atttggttag accttggttt aaattatatt catattccaa ttgattggga gatgccttct  
 300  
 gctgagcagt gcttattagt ttagatttg attgatcatt tagtgcaaaa tgaaattgtt  
 360  
 tggatacatt gcgcacaaaa taaacgcgt  
 389

<210> 2146  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 2146  
 Met Thr Thr Leu Glu Gln Ser Leu Ser Gln Ile Pro Ala Phe Ser Ile  
 1                      5                      10                      15  
 Ile His Glu His Leu Phe Ser Ser Ala Gln Pro Ser Ala Glu Gln Leu  
 20                      25                      30  
 Lys Leu Ile Lys Glu Phe Gly Cys Ser Thr Val Ile Asn Leu Ala Leu  
 35                      40                      45  
 Thr Asn Ala Ser Asn His Leu Glu Asn Glu Asp Arg Ile Cys Leu Asp  
 50                      55                      60  
 Leu Gly Leu Asn Tyr Ile His Ile Pro Ile Asp Trp Glu Met Pro Ser  
 65                      70                      75                      80  
 Ala Glu Gln Cys Leu Leu Val Leu Asp Leu Ile Asp His Leu Val Gln  
 85                      90                      95  
 Asn Glu Ile Val Trp Ile His Cys Ala Lys Asn Lys Arg  
 100                      105

<210> 2147  
 <211> 235  
 <212> DNA  
 <213> Homo sapiens

<400> 2147



ctccctgctg gctgcgtctc cgaggacatg tgcagtcctg acccctgttt caatggtggg  
 60  
 acttgccctg tcacctggaa tgacttccac tgtacctgcc ctgccaatTT caccggggcct  
 120  
 acatgtgccc agcagctgtg gtgtcccgcc cagccctgtc tccacactgc cactgtgtgtg  
 180  
 gcggaggcca cgttcccgca gggccccccc gccgcgttca gcgggcacaa cgcgt  
 235

<210> 2148

<211> 78

<212> PRT

<213> Homo sapiens

<400> 2148

Leu	Pro	Ala	Gly	Cys	Val	Ser	Glu	Asp	Met	Cys	Ser	Pro	Asp	Pro	Cys
1				5					10					15	
Phe	Asn	Gly	Gly	Thr	Cys	Leu	Val	Thr	Trp	Asn	Asp	Phe	His	Cys	Thr
			20					25					30		
Cys	Pro	Ala	Asn	Phe	Thr	Gly	Pro	Thr	Cys	Ala	Gln	Gln	Leu	Trp	Cys
		35					40					45			
Pro	Gly	Gln	Pro	Cys	Leu	Pro	Pro	Ala	Thr	Cys	Val	Ala	Glu	Ala	Thr
	50					55					60				
Phe	Arg	Glu	Gly	Pro	Pro	Ala	Ala	Phe	Ser	Gly	His	Asn	Ala		
65					70					75					

<210> 2149

<211> 1474

<212> DNA

<213> Homo sapiens

<400> 2149

ntactgccac cattggaact tttgatgttg atggggaaga gttgcaacac ctccagggtt  
 60  
 gtctgtctga tgggtggtgc gaatgatttg ccttgacaat agctgaaaaa ccaccatctg  
 120  
 caacacgtgg gagtaagact tctctgtctc tttgccagtg gtctgagggtg atgaaccacc  
 180  
 ctggcttggg gtgctgtgtc cagcaaaacta caggggtgcc gctggtagtt atggtgaaac  
 240  
 cagacacttt tcttatccac gagattaaga ctcttctctc taaagcgaag atccaagaca  
 300  
 tggttgctat taggcacacg gcttgcaatg agcagcagcg gacaacaatg attctgtctg  
 360  
 gtgaggatgg cagcctgcgc atttacctgg ccaacgtgga gaacacctcc tactgggtgc  
 420  
 agccatccct gcagcccagc agtgtcatca gcatcatgaa gcctgttcga aagcgcaaaa  
 480  
 cagctacaat cacaacceng cactgtctagc caggtgactt tccccattga cttttttgaa  
 540  
 cacaaccagc agctgacaga tgtggagttt ggtggtaacg acctcctaca ggtctataat  
 600  
 gcacaacaga taaaacaccg gctgaattcc actggcatgt atgtggccaa caccaagccc  
 660

ggaggetttca ccattgagat tagtaacaac aatagcacta tggatgatgac aggcattgcgg  
 720  
 atccagattg ggactcaagc aatagaacgg gcccgcgtcat atatcgagat cttcggcaga  
 780  
 actatgcagc tcaacctgag tcgctcacgc tggtttgact tcccccttcac cagagaagaa  
 840  
 gccctgcagg ctgataagaa gctgaacctc ttcattgggg cctcgggtgga tccagcagg  
 900  
 gtcaccatga tagatgctgt aaaaatttat ggcaagacta aggagcagtt tggctggcct  
 960  
 gatgagcccc cagaagaatt ccttctgccc tctgtcagca acatctgccc ttcaaatctg  
 1020  
 aaccagagca acggcactgg agatagcgac tcagctgccc ccactacgac cagtggaa  
 1080  
 gtccctggaga ggctggttgt gatttcttta gaagccctgg aaagctgctt tgccgttggc  
 1140  
 ccaatcatcg agaaggagag aaacaagaat gctgctcagg agctggccac tttgctgttg  
 1200  
 tccctgccag cacctgccag tgtccagcag cagtccaaga gccttctggc cagcctgcac  
 1260  
 accagccgct cggcctacca cagccacaag gtaactgttc tctcagggaa aggaaattgc  
 1320  
 agtgctgaca gggaatcaaa taagttagct cttcattgta aagcaacagc acagcaaagt  
 1380  
 aaggtagagg gaggatagca ttcagattag acctacattt tacagagttt ctctgagaa  
 1440  
 attctcaagt gccactcaaa actgagggtg agcc  
 1474

<210> 2150

<211> 312

<212> PRT

<213> Homo sapiens

<400> 2150

Ser	Leu	Phe	Glu	Ser	Ala	Lys	Gln	Leu	Gln	Ser	Gln	Pro	Xaa	Thr	Ser
1				5				10						15	
Ser	Gln	Val	Thr	Phe	Pro	Ile	Asp	Phe	Phe	Glu	His	Asn	Gln	Gln	Leu
		20						25					30		
Thr	Asp	Val	Glu	Phe	Gly	Gly	Asn	Asp	Leu	Leu	Gln	Val	Tyr	Asn	Ala
		35					40					45			
Gln	Gln	Ile	Lys	His	Arg	Leu	Asn	Ser	Thr	Gly	Met	Tyr	Val	Ala	Asn
		50				55					60				
Thr	Lys	Pro	Gly	Gly	Phe	Thr	Ile	Glu	Ile	Ser	Asn	Asn	Asn	Ser	Thr
65				70					75					80	
Met	Val	Met	Thr	Gly	Met	Arg	Ile	Gln	Ile	Gly	Thr	Gln	Ala	Ile	Glu
				85				90						95	
Arg	Ala	Pro	Ser	Tyr	Ile	Glu	Ile	Phe	Gly	Arg	Thr	Met	Gln	Leu	Asn
		100						105					110		
Leu	Ser	Arg	Ser	Arg	Trp	Phe	Asp	Phe	Pro	Phe	Thr	Arg	Glu	Glu	Ala
		115					120					125			
Leu	Gln	Ala	Asp	Lys	Lys	Leu	Asn	Leu	Phe	Ile	Gly	Ala	Ser	Val	Asp
		130				135					140				
Pro	Ala	Gly	Val	Thr	Met	Ile	Asp	Ala	Val	Lys	Ile	Tyr	Gly	Lys	Thr

```

145          150          155          160
Lys Glu Gln Phe Gly Trp Pro Asp Glu Pro Pro Glu Glu Phe Pro Ser
          165          170          175
Ala Ser Val Ser Asn Ile Cys Pro Ser Asn Leu Asn Gln Ser Asn Gly
          180          185          190
Thr Gly Asp Ser Asp Ser Ala Ala Pro Thr Thr Thr Ser Gly Thr Val
          195          200          205
Leu Glu Arg Leu Val Val Ser Ser Leu Glu Ala Leu Glu Ser Cys Phe
          210          215          220
Ala Val Gly Pro Ile Ile Glu Lys Glu Arg Asn Lys Asn Ala Ala Gln
225          230          235          240
Glu Leu Ala Thr Leu Leu Ser Leu Pro Ala Pro Ala Ser Val Gln
          245          250          255
Gln Gln Ser Lys Ser Leu Leu Ala Ser Leu His Thr Ser Arg Ser Ala
          260          265          270
Tyr His Ser His Lys Val Thr Val Leu Ser Gly Lys Gly Asn Cys Ser
          275          280          285
Ala Asp Arg Glu Ser Asn Lys Leu Ala Leu His Cys Lys Ala Thr Ala
          290          295          300
Gln Gln Ser Lys Val Glu Gly Gly
305          310

```

&lt;210&gt; 2151

&lt;211&gt; 511

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2151

```

gccggcgttt acctgtgggg cccggtcggg cgcggcaaga cctggctgat ggatcaattc
60
caccaaagcc tgnncgggtg ccggcgcnng cggcagcact ttcactactt catgggctgg
120
gtgcatcagc gctcctttca gttgaccggg atcgccgac cattgcgggc gctggctcgt
180
gagctggcgg ccgaggtgcg ggtgctgtgt ttcgatgagc tggttcgtcaa tgacatcggt
240
gacgcgatca ttctcgggcg cctgtttcag gtgatgttcg acgcaggcgt ggtgggtggtc
300
tgcacctcca atctgccgcc ggatcagctg tatgccgacg gcttcaaccg cgaccgcttc
360
ctgccggcga tcaccgcgat caaacagcac atgcaagtgg tcgcggtgaa tggcgcgga
420
gatcatcgct tgcattccgg cgccatcgag cagcgttact gggtcgctct gccggagcag
480
ggtagcgcgt tgagccaggt gttcgacgcg t
511

```

&lt;210&gt; 2152

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2152

Ala Gly Val Tyr Leu Trp Gly Pro Val Gly Arg Gly Lys Thr Trp Leu

1					5					10					15				
Met	Asp	Gln	Phe	His	Gln	Ser	Leu	Xaa	Gly	Cys	Arg	Arg	Xaa	Arg	Gln				
				20					25					30					
His	Phe	His	His	Phe	Met	Gly	Trp	Val	His	Gln	Arg	Ser	Phe	Gln	Leu				
				35					40					45					
Thr	Gly	Ile	Ala	Asp	Pro	Leu	Arg	Ala	Leu	Ala	Arg	Glu	Leu	Ala	Ala				
				50					55					60					
Glu	Val	Arg	Val	Leu	Cys	Phe	Asp	Glu	Leu	Phe	Val	Asn	Asp	Ile	Gly				
65					70					75					80				
Asp	Ala	Ile	Ile	Leu	Gly	Arg	Leu	Phe	Gln	Val	Met	Phe	Asp	Ala	Gly				
				85					90					95					
Val	Val	Val	Val	Cys	Thr	Ser	Asn	Leu	Pro	Pro	Asp	Gln	Leu	Tyr	Ala				
				100					105					110					
Asp	Gly	Phe	Asn	Arg	Asp	Arg	Phe	Leu	Pro	Ala	Ile	Thr	Ala	Ile	Lys				
				115					120					125					
Gln	His	Met	Gln	Val	Val	Ala	Val	Asn	Gly	Ala	Glu	Asp	His	Arg	Leu				
				130					135					140					
His	Pro	Gly	Ala	Ile	Glu	Gln	Arg	Tyr	Trp	Val	Ala	Leu	Pro	Glu	Gln				
145					150					155					160				
Gly	Ser	Ala	Leu	Ser	Gln	Val	Phe	Asp	Ala										
				165					170										

<210> 2153

&lt;211&gt; 528

<212> DNA

<213> Homo sapiens

<400> 2153

```

nnaccggtgc  caaagagctg  gggatcaacc  tgccgaacac  cgccggtacg  cagcaggtgt
60
tcagtacgtg  cacggcgatt  ggcggcgcca  attgggacca  ctccgcgctg  atcaagggcc
120
tggagcatat  ggccaacttt  tcgattcgcg  atcaataagc  cacaccgctc  ccacctttga
180
tggcattcca  agtctgaaat  tgatccatct  ctaataacaa  aaatccccgg  gagcccgttt
240
atgtcggctg  atccgcaaca  cctgcttcgc  gagctgtttg  ccacagccat  cgatgcggcc
300
cacccccggc  atgtccttga  accttatctg  cccgctgacc  gcacaggccg  tgtgattgtg
360
attgggcccc  gcaaaaaccg  acccgccatg  gccctcgctg  tcgagaacgg  ctggcaaggg
420
gaagtcaccg  gcctggtggt  caccgcctac  ggccacggcg  cgccgtgcaa  aaaaatcgaa
480
gtggtcgagg  ccgctcacc  ggtgccggat  gccgcgggcc  tggcggtg
528

```

<210> 2154

&lt;211&gt; 96

<212> PRT

<213> Homo sapiens

<400> 2154

Met Ser Val Asp Pro Gln His Leu Leu Arg Glu Leu Phe Ala Thr Ala

```

      1           5           10           15
Ile Asp Ala Ala His Pro Arg His Val Leu Glu Pro Tyr Leu Pro Ala
      20           25           30
Asp Arg Thr Gly Arg Val Ile Val Ile Gly Pro Gly Lys Thr Ala Pro
      35           40           45
Ala Met Ala Leu Val Val Glu Asn Gly Trp Gln Gly Glu Val Thr Gly
      50           55           60
Leu Val Val Thr Arg Tyr Gly His Gly Ala Pro Cys Lys Lys Ile Glu
      65           70           75           80
Val Val Glu Ala Ala His Pro Val Pro Asp Ala Ala Gly Leu Ala Val
      85           90           95

```

&lt;210&gt; 2155

&lt;211&gt; 297

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2155

```

gtgcaccgcc acggcacacc cgccatgccg cgccgctatt tcgaggccct gctgcaggag
60
ttcggccccg actgcgagggt gctcacgctc accgattcag agggcaaccc cctcagttcg
120
gtgctcagtt tctacttcgg tgatgaagtg ctgccctact atgcggggcga cgccgtcgcg
180
gcgcgcgaac tggcggccaa tgacttcaaa tactgggagc tgatgcgacg cgctgtgcg
240
cgcggcctca aggtgtttga ctacggccgc agcaagcagg gcacgggctc ctacgcn
297

```

&lt;210&gt; 2156

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2156

```

Met Pro Arg Arg Tyr Phe Glu Ala Leu Leu Gln Glu Phe Gly Pro Asp
      1           5           10           15
Cys Glu Val Leu Thr Val Thr Asp Ser Glu Gly Asn Pro Leu Ser Ser
      20           25           30
Val Leu Ser Phe Tyr Phe Arg Asp Glu Val Leu Pro Tyr Tyr Ala Gly
      35           40           45
Asp Ala Val Ala Ala Arg Glu Leu Ala Ala Asn Asp Phe Lys Tyr Trp
      50           55           60
Glu Leu Met Arg Arg Ala Cys Ala Arg Gly Leu Lys Val Phe Asp Tyr
      65           70           75           80
Gly Arg Ser Lys Gln Gly Thr Gly Ser Tyr Ala
      85           90

```

&lt;210&gt; 2157

&lt;211&gt; 711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2157

naccgagata acgaggtcgt catcatctcc actgggtccc aaggtgagcc actttcggcc  
 60  
 ctagcaagga tcgccaaccg agagcaccga gacatcgagg tgggggaggg agataaccgtt  
 120  
 ttgtggcat cctctctcat cccgggtaat gagaatgccg tctatcgagt gattaatggc  
 180  
 ctgacgaagc ttggcgccgc cgtggtacat aagggaacg ctttggcca cgtttccggc  
 240  
 catgccgcag cgggagagct gctgtacgcg tataacatcg tgcggccacg cgctgtgatg  
 300  
 ccgattcatg gtgaggtgcg tcattctgtc gctaatagccg atctggccaa agcaaccggt  
 360  
 gtcgatgaga acaacgtggt gcttgtcgag gacggcgggg ttattgacct tgttgacgga  
 420  
 gtaccgcgag ttgttgcaa ggtcgatgcc tcgtacatcc ttgttgacgg atctggggtg  
 480  
 ggggagctta ccgaggacac gctcactgat cgccgtatcc tcggtgagga gggattcttg  
 540  
 tcagtcgtca ccgtggtcga caccgctcg gcgtcagtgg tgtctcgccc ggcatccag  
 600  
 gcgcgtgggt ttgccgaggg cgactcggtc ttcgcggaga tcaccgacca gatcgtcacc  
 660  
 gagctagaga aggcgatggc cgttggtatg gacgataccc accggttgca a  
 711

&lt;210&gt; 2158

&lt;211&gt; 237

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2158

Xaa	Arg	Asp	Asn	Glu	Val	Val	Ile	Ile	Ser	Thr	Gly	Ser	Gln	Gly	Glu
1				5					10				15		
Pro	Leu	Ser	Ala	Leu	Ala	Arg	Ile	Ala	Asn	Arg	Glu	His	Arg	Asp	Ile
			20					25					30		
Glu	Val	Gly	Glu	Gly	Asp	Thr	Val	Leu	Leu	Ala	Ser	Ser	Leu	Ile	Pro
		35					40					45			
Gly	Asn	Glu	Asn	Ala	Val	Tyr	Arg	Val	Ile	Asn	Gly	Leu	Thr	Lys	Leu
	50					55					60				
Gly	Ala	Ala	Val	Val	His	Lys	Gly	Asn	Ala	Leu	Val	His	Val	Ser	Gly
65					70				75					80	
His	Ala	Ala	Ala	Gly	Glu	Leu	Leu	Tyr	Ala	Tyr	Asn	Ile	Val	Arg	Pro
			85						90					95	
Arg	Ala	Val	Met	Pro	Ile	His	Gly	Glu	Val	Arg	His	Leu	Val	Ala	Asn
		100						105					110		
Ala	Asp	Leu	Ala	Lys	Ala	Thr	Gly	Val	Asp	Glu	Asn	Asn	Val	Val	Leu
		115					120					125			
Val	Glu	Asp	Gly	Gly	Val	Ile	Asp	Leu	Val	Asp	Gly	Val	Pro	Arg	Val
	130					135					140				
Val	Gly	Lys	Val	Asp	Ala	Ser	Tyr	Ile	Leu	Val	Asp	Gly	Ser	Gly	Val
145				150					155					160	
Gly	Glu	Leu	Thr	Glu	Asp	Thr	Leu	Thr	Asp	Arg	Arg	Ile	Leu	Gly	Glu
			165				170					175			
Glu	Gly	Phe	Leu	Ser	Val	Val	Thr	Val	Val	Asp	Thr	Arg	Ser	Ala	Ser

```

      180              185              190
Val Val Ser Arg Pro Ala Ile Gln Ala Arg Gly Phe Ala Glu Gly Asp
      195              200              205
Ser Val Phe Ala Glu Ile Thr Asp Gln Ile Val Thr Glu Leu Glu Lys
      210              215              220
Ala Met Ala Gly Gly Met Asp Asp Thr His Arg Leu Gln
      225              230              235

```

&lt;210&gt; 2159

&lt;211&gt; 322

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2159

```

tcgcgagcac actccagcct ctggagagac gacaacgcgt gaaggggcac cagcttgagg
60
ggcagcagct ccagggggcgg cctgggaggg ctttgtgcag aagaagcctg tttccttcta
120
cctgtttgga aaagtgtct ctgcagatgg tgggtgagag ttcgctgccg gggccactgt
180
cttccttgcc ctgcggacac ttcttcccca ccttctaaa gctgtgggag acctggagcc
240
gtggagcatc aatggctctt tgactcagga atcttaaaaa atcacacctt ggggctacca
300
tgggggcctt ctggttctcc tt
322

```

&lt;210&gt; 2160

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2160

```

Met Val Ala Pro Gly Cys Asp Phe Leu Arg Phe Leu Ser Gln Arg Ala
  1              5              10              15
Ile Asp Ala Pro Arg Leu Gln Val Ser His Ser Phe Arg Lys Val Gly
      20              25              30
Lys Lys Cys Pro Gln Gly Arg Glu Asp Ser Gly Pro Gly Ser Glu Leu
      35              40              45
Ser Pro Thr Ile Cys Arg Asp Asn Phe Ser Lys Gln Val Glu Gly Asn
      50              55              60
Arg Leu Leu Leu His Lys Ala Leu Pro Gly Arg Pro Trp Ser Cys Cys
      65              70              75              80
Pro Ala Ser Trp Cys Pro Phe Thr Arg Cys Arg Leu Ser Arg Gly Trp
      85              90              95
Ser Val Leu Ala
      100

```

&lt;210&gt; 2161

&lt;211&gt; 1070

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2161

tcttagggga aggggaaggct tatctgaaga gtagacctct ggttttgaat gagggagaca  
 60  
 gtggggatat gaggggagga aacctcaaaa agaatatgta tccatcacta tgaaaggtta  
 120  
 ggctatacag gggaagcctc caaaggga aa tctggaaaaa tgttctgaga gggacattaa  
 180  
 ggatgtactc agaaattaag aaaacatatt aggacttgcc aaaagtgaga gaagcaactg  
 240  
 aggagactta tatgcaaaaa tcgcaagaa ggagagaaca aaagatggag gttggatgct  
 300  
 aaatagggaa agagaacgcg tgaatgaggt agggggcaga acatgcagtg cagaaaaaca  
 360  
 acagatatgg aagggcatta aagagggcta aatgggaata ttaggaaatg agagttggga  
 420  
 atttgtcaga gttgtgtatt aacaaggaga gggtaaggta agaaggtggc aaagtaagag  
 480  
 ccagggcata aggttttgct gtccaggaag ctttgttga aaaatgttag aagtaatggg  
 540  
 tttggtcagt atggtgagag gtgagagagg ctaaattggga tgggcataaa gggcaggcca  
 600  
 gtggcaagaa tcctatgaaa gtgtaggcag atctgagagc acagacaaat acagtggaga  
 660  
 atgtggcaca gggcagaggg cagtgggctg agcagcaggt gcccatgggg aggggagtat  
 720  
 ccagaagaac ccattgagtc cctaagaatg acacacaggt gacagctgaa agaaggaggg  
 780  
 acacagaaga tatagcagca tgattctctg gggcaaaatg aggaagaaag gaatggaaga  
 840  
 agaaagtga ggggttctgc tgatgtgagg ggatgactgg aggaaaggca ggtattgact  
 900  
 ggggggtaaa ggaaccattc ttgatcaag gttatgatgg aataagaagg aagagagagc  
 960  
 tggctagctg agtaaaggac catcgataa aacagacaaa agttaagact agatggagtg  
 1020  
 gcaactagc agatcagatg tatttttaaa aggggaaact gctaagatct  
 1070

<210> 2162

<211> 145

<212> PRT

<213> Homo sapiens

<400> 2162

Met	Val	Leu	Tyr	Ser	Ala	Ser	Gln	Leu	Ser	Leu	Pro	Ser	Tyr	Ser	Ile
1				5				10					15		
Ile	Thr	Leu	Ile	Gln	Glu	Trp	Phe	Leu	Tyr	Pro	Pro	Val	Asn	Thr	Cys
		20						25					30		
Leu	Ser	Ser	Ser	His	Pro	Leu	Thr	Ser	Ala	Gly	Thr	Leu	His	Phe	Leu
		35					40					45			
Leu	Pro	Phe	Leu	Ser	Ser	Ser	Phe	Cys	Pro	Arg	Glu	Ser	Cys	Cys	Tyr
	50				55					60					
Ile	Phe	Cys	Val	Pro	Pro	Ser	Phe	Ser	Cys	His	Leu	Cys	Val	Ile	Leu
65				70					75					80	
Arg	Asp	Ser	Met	Gly	Ser	Ser	Gly	Tyr	Ser	Pro	Pro	His	Gly	His	Ser



85 90 95  
 Leu Leu Ser Pro Leu Pro Ser Ala Leu Cys His Ile Leu His Cys Ile  
 100 105 110  
 Cys Leu Cys Ser Gln Ile Cys Leu His Phe His Arg Ile Leu Ala Thr  
 115 120 125  
 Gly Leu Pro Phe Met Pro Ile Pro Phe Ser Leu Ser His Leu Ser Pro  
 130 135 140  
 Tyr  
 145

<210> 2163  
 <211> 657  
 <212> DNA  
 <213> Homo sapiens

<400> 2163  
 tatttaaattc ttataaaaa aggtaggagg atcaggactt cgacccccctt aaaacgcggc  
 60  
 ggctccctc caatccacct ccaattccta caccaccccc gctctcccc ccccccttt  
 120  
 tgggtccggg ttggaagggt gggtgaaatg ggaaccgaat accaatttca cccgggaacc  
 180  
 agtaatgcc atgataaccg ccaagtggg accgaagtgg ggatccataa gtacgggagg  
 240  
 ccagtggggg ggaattgggt taagccccct cccagccttt ctccgaccgc gtgctccgtc  
 300  
 agacatgcc agaggctctc tctccaggag agccacctgt gaaaccacc cggcatgctc  
 360  
 ctcccaccac tgtgcacaga cgagtgcctg ggctccagag agggagggag ctgaaggcct  
 420  
 cagacaggag tccgtccctg ccagtcccat catccaaga aacatccggc ccgactccct  
 480  
 gcagctccat ggctcaacaa ggtgcggatg cctgctggac ctggctgctt tccatccaac  
 540  
 ttgtatccct tcccaagag gaagagtgtt acctaggag aagtgtggtg cgcacaggca  
 600  
 tgcagcctgg tctctgtctc aggcggcttg cgcagattcc tagaggaatc tgcagcg  
 657

<210> 2164  
 <211> 152  
 <212> PRT  
 <213> Homo sapiens

<400> 2164  
 Met Pro Met Ile Thr Ala Lys Leu Gly Pro Lys Leu Gly Ser Ile Ser  
 1 5 10 15  
 Thr Gly Gly Gln Trp Gly Gly Ile Gly Leu Ser Pro Leu Pro Ala Phe  
 20 25 30  
 Leu Arg Pro Arg Ala Pro Ser Asp Met Pro Arg Gly Ser Leu Ser Arg  
 35 40 45  
 Arg Ala Thr Cys Glu Thr His Pro Ala Cys Ser Ser His His Cys Ala  
 50 55 60  
 Gln Thr Ser Ala Trp Ala Pro Glu Arg Glu Gly Ala Glu Gly Leu Arg

```

65          70          75          80
Gln Glu Ser Val Pro Ser Ser Pro Ile Ile Pro Arg Asn Ile Arg Pro
      85          90          95
Asp Ser Leu Gln Leu His Gly Ser Thr Arg Cys Gly Cys Leu Leu Asp
      100          105          110
Leu Ala Ala Phe His Pro Thr Leu Ile Pro Ser Pro Arg Gly Arg Val
      115          120          125
Leu Pro Arg Asp Lys Cys Gly Ala His Arg His Ala Ala Trp Ser Leu
      130          135          140
Ala Gln Ala Ala Cys Ala Asp Ser
145          150

```

&lt;210&gt; 2165

&lt;211&gt; 962

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2165

```

nctttctcat cgacagcgac gcacaaccgg cgacatcacc ggtgacggtt caaggtggca
60
gcccgagggc ccgccgtgaa cttatttgtt cgtcttatgg aagaaaagtc actcggaagt
120
accgtaaatc accccagcgc ctcattcccc gaattctgtt gccatctgct gtcgcccctg
180
cgcttaaggc atcacccac tagactgacc gaagtctcgc cgagggaggc tagggaggct
240
taggtggcca ggaatgacat cgggacgacg tctacgcgtc gaataggcag cggacgtacg
300
tcgagtaccg gccgtacggt ggtgtcttct gaccgcacac gcagagctat cgctaaaaga
360
ttgatggccc gcacctcagc tatgacgacg gccactctag aggaaatggg tcgtcgacac
420
tcctggttcc gtgatctgtc agccgaagaa agatcgtgga tctcgatcgt ggctcgctca
480
ggtattgacg gcttcgtcca gtggtttgct gacgatgacg ccgagcccta ctccccacc
540
gacgtcttcg acgtggcgcc ccggtccatg acccgcaaga tctccttgca ccagacagtc
600
gagctcgtec gcaccacgat tgacgtcgtt gaggcacaaa ttgagaccga aatgccacgc
660
ggtgatcgcc aagtgtcgcg cactgccatc gttcactact ccgcgaggt ggccttcgcc
720
gccgccgagg ttacgcgcg agccgccgaa cgtcgcggtt cctgggatga acgtctggaa
780
tccctcgteg ttgatgccgt cgtgcgagcc gacgccgatg aacagctcat ctgcgagct
840
tctactctcg gctggcgccc gggcatcaac ctctgcgtcg ttgtcgggcg ggccccgacg
900
accgagcatg aactccacgt gctgcgacgt gatggagaac gcatgcagat gacggtgcta
960
gc
962

```

&lt;210&gt; 2166

<211> 239  
 <212> PRT  
 <213> Homo sapiens

<400> 2166  
 Val Ala Arg Asn Asp Ile Gly Thr Thr Ser Thr Arg Arg Ile Gly Ser  
 1 5 10 15  
 Gly Arg Thr Ser Ser Thr Gly Arg Thr Val Val Ser Ser Asp Arg Thr  
 20 25 30  
 Arg Arg Ala Ile Ala Lys Arg Leu Met Ala Arg Thr Ser Ala Met Thr  
 35 40 45  
 Thr Ala Thr Leu Glu Glu Met Gly Arg Arg His Ser Trp Phe Arg Asp  
 50 55 60  
 Leu Ser Ala Glu Glu Arg Ser Trp Ile Ser Ile Val Ala Arg Ser Gly  
 65 70 75 80  
 Ile Asp Gly Phe Val Gln Trp Phe Ala Asp Asp Ala Glu Pro Tyr  
 85 90 95  
 Ser Pro Thr Asp Val Phe Asp Val Ala Pro Arg Ser Met Thr Arg Lys  
 100 105 110  
 Ile Ser Leu His Gln Thr Val Glu Leu Val Arg Thr Thr Ile Asp Val  
 115 120 125  
 Val Glu Ala Gln Ile Glu Thr Glu Met Pro Arg Gly Asp Arg Gln Val  
 130 135 140  
 Leu Arg Thr Ala Ile Val His Tyr Ser Arg Glu Val Ala Phe Ala Ala  
 145 150 155 160  
 Ala Glu Val Tyr Ala Arg Ala Ala Glu Arg Arg Gly Thr Trp Asp Glu  
 165 170 175  
 Arg Leu Glu Ser Leu Val Val Asp Ala Val Val Arg Ala Asp Ala Asp  
 180 185 190  
 Glu Gln Leu Ile Ser Arg Ala Ser Thr Leu Gly Trp Arg Pro Gly Ile  
 195 200 205  
 Asn Leu Cys Val Val Val Gly Arg Ala Pro Thr Thr Glu His Glu Leu  
 210 215 220  
 His Val Leu Arg Arg Asp Gly Glu Arg Met Gln Met Thr Val Leu  
 225 230 235

<210> 2167  
 <211> 325  
 <212> DNA  
 <213> Homo sapiens

<400> 2167  
 accggtgcag tttgtgaggg gttggtgacg cccgatcggg aggttcacgc cgtcacggcg  
 60  
 catccacatt atcccgaactg gaagatctcg ccagggttacg gacagtgggc gcgtagcgaa  
 120  
 cagatcgaca gtgtgactgt gacgcgagtc agacacttcg tcccgcggcg tcccacggcg  
 180  
 attcttcgag cgggtgtctga ggtgacgttc gggttgcgtc tctgcgccgt ccgttggcga  
 240  
 agcaccgcgg cgattgtggc tgtgtcgccg gccttgctct cgacgcggtc gcgcgggctg  
 300  
 tgcgctgac tcccacagca taccc  
 325

<210> 2168  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 2168  
 Thr Gly Ala Val Cys Glu Gly Leu Val Thr Pro Asp Arg Glu Val His  
 1 5 10 15  
 Ala Val Thr Ala His Pro His Tyr Pro Asp Trp Lys Ile Ser Pro Gly  
 20 25 30  
 Tyr Gly Gln Trp Ser Arg Ser Glu Gln Ile Asp Ser Val Thr Val Thr  
 35 40 45  
 Arg Val Arg His Phe Val Pro Arg Arg Pro Thr Ala Ile Leu Arg Ala  
 50 55 60  
 Val Ser Glu Val Thr Phe Gly Leu Arg Leu Cys Ala Val Arg Trp Arg  
 65 70 75 80  
 Ser Thr Ala Ala Ile Val Ala Val Ser Pro Ala Leu Leu Ser Thr Arg  
 85 90 95  
 Ser Arg Gly Ser Cys Ala Asp Leu Pro Gln His Thr  
 100 105

<210> 2169  
 <211> 309  
 <212> DNA  
 <213> Homo sapiens

<400> 2169  
 gaggacgcct acgtgctcat caccagggc aagatctcgg cgategccga cgtcctgccg  
 60  
 atcctggaga aggtcgtaa ggcggcaag ccgctgctcg tcatcgccga ggacatcgac  
 120  
 ggggaggccc tgtccaccct cgctcgtaat aagatccgcg gtaccttcag ctcggtggca  
 180  
 gtcaaggcgc ccggcttcgg tgaccgccgc aaggcaatgc tgcaggacat cgccaccctc  
 240  
 accggtggtc aggtcgtcgc tcccgagggt gggctcaagc tcgaccaggt gggcctcgag  
 300  
 gttcagggc  
 309

<210> 2170  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 2170  
 Glu Asp Ala Tyr Val Leu Ile Thr Gln Gly Lys Ile Ser Ala Ile Ala  
 1 5 10 15  
 Asp Val Leu Pro Ile Leu Glu Lys Val Val Lys Ala Gly Lys Pro Leu  
 20 25 30  
 Leu Val Ile Ala Glu Asp Ile Asp Gly Glu Ala Leu Ser Thr Leu Val  
 35 40 45  
 Val Asn Lys Ile Arg Gly Thr Phe Ser Ser Val Ala Val Lys Ala Pro

50                      55                      60  
 Gly Phe Gly Asp Arg Arg Lys Ala Met Leu Gln Asp Ile Ala Thr Leu  
 65                      70                      75                      80  
 Thr Gly Gly Gln Val Val Ala Pro Glu Val Gly Leu Lys Leu Asp Gln  
                     85                      90                      95  
 Val Gly Leu Glu Val Gln Gly  
                     100

<210> 2171  
 <211> 518  
 <212> DNA  
 <213> Homo sapiens

<400> 2171  
 cgcgtaatgt gtattaaggt ccttggtggc tcgcatcgcc gttatgcagc aatcgggtgat  
 60  
 atcatcaaag ttctcagtga ggaagcaatt cctcgcggaa aaattaaaaa aggtaatggt  
 120  
 cattcagctg tggtagtgcg taccagaaaa ggtgtacgct gtcccgatgg ttctgttatt  
 180  
 cgttttgatc gcaacgcagc ggttatcttg aatgcaaaca accagccagt cggtacacgt  
 240  
 atctttggcc ctgtaaccgc tgagcttcga aatgaaaatt tcatgaagat tgtttcactg  
 300  
 gcgccagaag tactgtaagg aaccgaaaat ggcagcaaaa ataaaacgtg acgatgaagt  
 360  
 aattgttatt gccggtaaag ataaaggtaa aactgggaaa gtttctcaag ttttaactaa  
 420  
 cggtaaagta attattgaag gtgtaaatgt tcaaaagaaa caccaaaaac caaacctca  
 480  
 agcgggcgtg gaaggcggaa tcattgaaca gaatgcat  
 518

<210> 2172  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2172  
 Arg Val Met Cys Ile Lys Val Leu Gly Gly Ser His Arg Arg Tyr Ala  
 1                      5                      10                      15  
 Ala Ile Gly Asp Ile Ile Lys Val Ser Val Lys Glu Ala Ile Pro Arg  
                     20                      25                      30  
 Gly Lys Ile Lys Lys Gly Asn Val His Ser Ala Val Val Val Arg Thr  
                     35                      40                      45  
 Arg Lys Gly Val Arg Arg Pro Asp Gly Ser Val Ile Arg Phe Asp Arg  
                     50                      55                      60  
 Asn Ala Ala Val Ile Leu Asn Ala Asn Asn Gln Pro Val Gly Thr Arg  
 65                      70                      75                      80  
 Ile Phe Gly Pro Val Thr Arg Glu Leu Arg Asn Glu Asn Phe Met Lys  
                     85                      90                      95  
 Ile Val Ser Leu Ala Pro Glu Val Leu  
                     100                      105

&lt;210&gt; 2173

&lt;211&gt; 475

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2173

```

nntggggaag aaatgccggt gcatgcactt tgtgcagcat taggtgcagg ggtgatgcag
60
cgggcgcgtg ccttttgcgg cggggtttcg agcattcatc tggatgcacg attttcgcac
120
gcatttcttg taccctcgtc atgcgtttct ccccatgcac acacattatc gcctttgcac
180
ccgcagggac gcatggaata cctcgtgaaa tgggaaggat ggtcgcagaa gtacagcaca
240
tggaaccgga aggaataacat cctggtgctc cgttgctcgc cagcctttga ggaaaggga
300
agagagatgg agctctatgg ccccaaaaag cgtggacca agccaaaac cttcctctc
360
aaagcgcagg ccaaggcaaa ggccaaaact tacgagtttc gaagtgactc agccaggggc
420
atccggatcc cctaccctgg ccgctcgccc caggacctgg cctccacttc ccggg
475

```

&lt;210&gt; 2174

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2174

```

Xaa Gly Glu Glu Met Pro Val His Ala Leu Cys Ala Ala Leu Gly Ala
1      5      10      15
Gly Val Met Gln Arg Ala Arg Ala Phe Cys Gly Gly Val Ser Ser Ile
20     25     30
His Leu Val His Ala Phe Ser His Ala Phe Leu Val Ser Ser Cys
35     40     45
Val Ser Pro His Ala His Thr Leu Ser Pro Leu His Pro Gln Gly Arg
50     55     60
Met Glu Tyr Leu Val Lys Trp Lys Gly Trp Ser Gln Lys Tyr Ser Thr
65     70     75     80
Trp Glu Pro Glu Glu Asn Ile Leu Asp Ala Arg Leu Leu Ala Ala Phe
85     90     95
Glu Glu Arg Glu Arg Glu Met Glu Leu Tyr Gly Pro Lys Lys Arg Gly
100    105    110
Pro Lys Pro Lys Thr Phe Leu Leu Lys Ala Gln Ala Lys Ala Lys Ala
115    120    125
Lys Thr Tyr Glu Phe Arg Ser Asp Ser Ala Arg Gly Ile Arg Ile Pro
130    135    140
Tyr Pro Gly Arg Ser Pro Gln Asp Leu Ala Ser Thr Ser Arg
145    150    155

```

&lt;210&gt; 2175

&lt;211&gt; 462

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 2175  
 cgcgacaccc tctttggtgg gcgccttcct tctccgaatt cgcgaaacct ccagactctg  
 60  
 gccaggagg ttgtcgagcg tggagccgat atcggcattg ccactgatgg tgacgcagac  
 120  
 cgcttcggta tcattgatga ccaggggcat ttcttgcatc ccaaccagat cctcgtattg  
 180  
 ctgtacacct accttctgga ggacaaggga tggcaggtgc cctgcgtgcg taacctcgcg  
 240  
 acgaccaccc tgcttgaccg tgtcgccgag gccacgggc agacctgtta cgaggtaccg  
 300  
 gtcggattta agtgggtgtc gtccaagatg gccgagacca acgccgtcat cggtggtag  
 360  
 tcctccggtg gtttgaccgt ccaggggcat attgcaggca aggatggtgt ctatgctggc  
 420  
 accctgctgg tggaaatgat cgccaagcgg ggtaagaagc tt  
 462

<210> 2176  
 <211> 154  
 <212> PRT  
 <213> Homo sapiens

<400> 2176  
 Arg Asp Thr Leu Phe Gly Gly Arg Leu Pro Ser Pro Asn Ser Arg Thr  
 1 5 10 15  
 Leu Gln Thr Leu Ala Gln Glu Val Val Glu Arg Gly Ala Asp Ile Gly  
 20 25 30  
 Ile Ala Thr Asp Gly Asp Ala Asp Arg Leu Gly Ile Ile Asp Asp Gln  
 35 40 45  
 Gly His Phe Leu His Pro Asn Gln Ile Leu Val Leu Leu Tyr Thr Tyr  
 50 55 60  
 Leu Leu Glu Asp Lys Gly Trp Gln Val Pro Cys Val Arg Asn Leu Ala  
 65 70 75 80  
 Thr Thr His Leu Leu Asp Arg Val Ala Glu Ala His Gly Gln Thr Cys  
 85 90 95  
 Tyr Glu Val Pro Val Gly Phe Lys Trp Val Ser Ser Lys Met Ala Glu  
 100 105 110  
 Thr Asn Ala Val Ile Gly Gly Glu Ser Ser Gly Gly Leu Thr Val Gln  
 115 120 125  
 Gly His Ile Ala Gly Lys Asp Gly Val Tyr Ala Gly Thr Leu Leu Val  
 130 135 140  
 Glu Met Ile Ala Lys Arg Gly Lys Lys Leu  
 145 150

<210> 2177  
 <211> 478  
 <212> DNA  
 <213> Homo sapiens

<400> 2177  
 ctcgagaatc atgacggcga cgacgtgact atctccaccc gtgtgcctcg tgacggcggg  
 60

accttgact cgattgtcgg cgtgctggcc ggggcatcct ggtatcagcg ggagatccac  
 120  
 gacttttttg gtgtgaggtt tgcggccct ggggcagatg atcgtgccct ccttgccac  
 180  
 gatgcaccga aaccgcccct gcgcaaggaa gctgtgttgg cgcagcagc tgacaccgtg  
 240  
 tggccgggtg cggctgacca ggctggctcg aagtcgcga gtcgacgtct gccggtcggc  
 300  
 gttcctgacc ctgagacgtg gcggcgtatc aaagacggcg aggatattcc ggatgccgag  
 360  
 gtcctcggg ccatgtctgg ccggcgcccg cgatcagctg cccgtcgaat ggcaagcacg  
 420  
 gcgtcaggca ggcaggcatg agacattcga ctatcaacct tgacgtcgac gcgtgcac  
 478

<210> 2178

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2178

Leu	Glu	Asn	His	Asp	Gly	Asp	Asp	Val	Thr	Ile	Ser	Thr	Arg	Val	Pro
1			5					10					15		
Arg	Asp	Gly	Gly	Thr	Leu	Asp	Ser	Ile	Val	Gly	Val	Leu	Ala	Gly	Ala
		20					25						30		
Ser	Trp	Tyr	Gln	Arg	Glu	Ile	His	Asp	Phe	Phe	Gly	Val	Arg	Phe	Val
		35				40					45				
Gly	Pro	Gly	Ala	Asp	Asp	Arg	Ala	Leu	Leu	Val	His	Asp	Ala	Pro	Lys
	50				55					60					
Pro	Pro	Leu	Arg	Lys	Glu	Ala	Val	Leu	Ala	Gln	Arg	Ala	Asp	Thr	Val
65				70					75					80	
Trp	Pro	Gly	Ala	Ala	Asp	Gln	Ala	Gly	Ser	Lys	Ser	Ala	Ser	Arg	Arg
			85					90					95		
Leu	Pro	Val	Gly	Val	Pro	Asp	Pro	Glu	Thr	Trp	Arg	Arg	Ile	Lys	Asp
		100					105						110		
Gly	Glu	Asp	Ile	Pro	Asp	Ala	Glu	Val	Ile	Ala	Ala	Met	Ser	Gly	Arg
		115				120					125				
Arg	Pro	Arg	Ser	Ala	Ala	Arg	Met	Ala	Ser	Thr	Ala	Ser	Gly	Arg	
	130				135						140				
Gln	Ala														
145															

<210> 2179

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2179

gtgcacttcc gagtggacgt cgagcgtcgc attaacgggg ccggcgcggt gggcgcacac  
 60  
 aagacgtcga tgctgcagga tctggacngc gaccgcgcga tggagatcga cccgctcgtc  
 120  
 tccgtcgttc aggagatggg acgcctggcc aacgtgccga cgcccacgct cgatgtcgtg  
 180



ctcccactga tcaagcaacg tgaattcatg acgaagccgg atgccgtggc ggccgcgcag  
 240  
 gaacgtctgg ctaaagcggc ataaaccagc cgccgaaacc agcggcataa cgcggg  
 296

<210> 2180  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 2180  
 Val His Phe Arg Val Asp Val Glu Arg Arg Ile Asn Gly Ala Gly Ala  
 1 5 10 15  
 Val Gly Ala His Lys Thr Ser Met Leu Gln Asp Leu Asp Xaa Asp Arg  
 20 25 30  
 Ala Met Glu Ile Asp Pro Leu Val Ser Val Val Gln Glu Met Gly Arg  
 35 40 45  
 Leu Ala Asn Val Pro Thr Pro Thr Leu Asp Val Val Leu Pro Leu Ile  
 50 55 60  
 Lys Gln Arg Glu Phe Met Thr Lys Pro Asp Ala Val Ala Ala Ala Gln  
 65 70 75 80  
 Glu Arg Leu Ala Lys Ala Ala  
 85

<210> 2181  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 2181  
 ngcgcgccgg gatggatcat agtctggctc gatgcatcac gtgcgcgcat gcgcgcgctg  
 60  
 tcgattcccg acggcatgat cgcggcactc gaccgtaccg gcaaggcgca aacgcacctc  
 120  
 acgctggcat cgccggaagc ggggtgtcgtc agcgaactga acgtgcgcga cgggtgcgatg  
 180  
 gtcgcgccgg ggcagacgct cgcgaagatt tcgggcctct cgaagctctg gctgatcgtc  
 240  
 gagattcccg aagcgtctgc gctcgatgcg cgtccgggca tgaccgtcga cgcgacgttc  
 300  
 tcgggcgatc cgacgcagca tttcaccggg cgtatccgcy agatcctgcc gggcatcacc  
 360  
 accagtagcc gcacgcttca ggcgcgc  
 387

<210> 2182  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 2182  
 Xaa Ala Pro Gly Trp Ile Ile Val Trp Leu Asp Ala Ser Arg Ala Arg  
 1 5 10 15  
 Met Arg Ala Leu Ser Ile Pro Asp Gly Met Ile Ala Ala Leu Asp Arg

```

                20                25                30
Thr Gly Lys Ala Gln Thr His Leu Thr Leu Ala Ser Pro Glu Ala Gly
                35                40                45
Val Val Ser Glu Leu Asn Val Arg Asp Gly Ala Met Val Ala Pro Gly
                50                55                60
Gln Thr Leu Ala Lys Ile Ser Gly Leu Ser Lys Leu Trp Leu Ile Val
65                70                75                80
Glu Ile Pro Glu Ala Leu Ala Leu Asp Ala Arg Pro Gly Met Thr Val
                85                90                95
Asp Ala Thr Phe Ser Gly Asp Pro Thr Gln His Phe Thr Gly Arg Ile
                100                105                110
Arg Glu Ile Leu Pro Gly Ile Thr Thr Ser Ser Arg Thr Leu Gln Ala
                115                120                125
Arg

```

&lt;210&gt; 2183

&lt;211&gt; 310

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2183

```

aagcttgaaa aacaaatttg tgcacagtct gataacccaa aaatgactga tggattggct
60
ctgcattttc caagcagggg ggggtcgggc atggagaatg aaacattctg agaaaagact
120
taaatgtgga aacttttggg tcaagagggt attctaggag atacaagaaa tatctctctgg
180
gggcatccaa agggaataac actgtaatct tgagtgatgt atggttccat tgcccagga
240
ataggggatga aaaccataaa ctcctttggg tgggtattaa cttatcantc aaagttacca
300
tanataatgg
310

```

&lt;210&gt; 2184

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2184

```

Met Val Thr Leu Xaa Asp Lys Leu Ile Pro Thr Gln Arg Ser Leu Trp
1                5                10                15
Phe Ser Ser Leu Phe Leu Gly Gln Trp Asn His Thr Ser Leu Lys Ile
                20                25                30
Thr Val Leu Phe Pro Leu Asp Ala Pro Arg Arg Tyr Phe Leu Tyr Leu
35                40                45
Leu Glu Tyr Pro Leu Glu Pro Lys Val Ser Thr Phe Lys Ser Phe Leu
50                55                60
Arg Met Phe His Ser Pro Cys Pro Thr Pro Pro Cys Leu Glu Asn Ala
65                70                75                80
Glu Pro Ile His Gln Ser Phe Leu Gly Tyr Gln Thr Val His Lys Phe
85                90                95
Val Phe Gln Ala

```

100

&lt;210&gt; 2185

&lt;211&gt; 723

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2185

```

ngaatatcca tgcagcagct cgtcgacaat tttgacggtg ccatccctga cgatcttgac
60
tctcttgtga ccctgcccgg agtcggtcgt aagaccgcca atgttgtttt aggtaatgcc
120
ttcggcatcc ccggaatcac cccggacacc cacgtcatgc gggatatctcg acgtctgggc
180
tggaccgatg cgactacccc cgccaagggtg gaaaccgacc tggctgagct ttttgaccgg
240
tctgaatggg tgatgttggt tcaccgcctc atctggcacg ggcggcgggc ctgtcactcg
300
cggcgtcctg cctgcggggg atgcccgggt gccgagtggt gccgcctctt cggggaaggc
360
ccaacggatc ccgaggaggc cgccacgtta gtccgggagc gcgctcgatg agggggatga
420
acgttttcgg cgcggtgatg gccgccttga tgtttgctgg ctgcggggga gatgcgggca
480
tagctcatca gcgtgaaaat gccggaatac cggggtgctc gcatttgccg tcggggccga
540
ttgcgaaaag ttccggggcg gccacagagg gccggcccat gcccgatcac ggcttgcaat
600
gccttggtga ggggccgacg atctccatgt ctccggcgac atcgaggggc gtgaccgtcg
660
tgacgatctg ggcgtcgtgg tgctgaccat gtcgtagtga ggctccgctc attgcgaacg
720
cgt
723

```

&lt;210&gt; 2186

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2186

```

Xaa Ile Ser Met Gln Gln Leu Val Asp Asn Phe Asp Gly Ala Ile Pro
 1             5             10             15
Asp Asp Leu Asp Ser Leu Val Thr Leu Pro Gly Val Gly Arg Lys Thr
      20             25             30
Ala Asn Val Val Leu Gly Asn Ala Phe Gly Ile Pro Gly Ile Thr Pro
      35             40             45
Asp Thr His Val Met Arg Val Ser Arg Arg Leu Gly Trp Thr Asp Ala
      50             55             60
Thr Thr Pro Ala Lys Val Glu Thr Asp Leu Ala Glu Leu Phe Asp Pro
      65             70             75             80
Ser Glu Trp Val Met Leu Cys His Arg Leu Ile Trp His Gly Arg Arg
      85             90             95
Arg Cys His Ser Arg Arg Pro Ala Cys Gly Val Cys Pro Val Ala Glu

```

1617

100 105 110  
 Trp Cys Pro Ser Phe Gly Glu Gly Pro Thr Asp Pro Glu Glu Ala Ala  
 115 120 125  
 Thr Leu Val Arg Glu Pro Arg Arg  
 130 135

<210> 2187  
 <211> 342  
 <212> DNA  
 <213> Homo sapiens

<400> 2187  
 nnacgcgtga aggatgcgcc ccggtcgacc ggccatccgt cttgcctcgc aggcattccag  
 60  
 cccgccatat gctgcaaccg caacaccgct ttgccgtcgc atggcatctc cactccggat  
 120  
 cgcacgatc cagcagggct atcggcgcca aagaagttgc cggggcaaaa tcccggcgag  
 180  
 gaaagcccga tggagtggaa gacgctgctc aacgacaccc gcttcggagg ggtcgccagc  
 240  
 ctcgatggga cgcgcggacg gtcggagttc cagaaggacc acgaccggat catcttctcc  
 300  
 gaagccttcc gcaagctggg ccgcaagacc caggtgcacc cg  
 342

<210> 2188  
 <211> 51  
 <212> PRT  
 <213> Homo sapiens

<400> 2188  
 Met Glu Trp Lys Thr Leu Leu Asn Asp Thr Arg Phe Gly Gly Val Ala  
 1 5 10 15  
 Ser Leu Asp Gly Thr Arg Gly Arg Ser Glu Phe Gln Lys Asp His Asp  
 20 25 30  
 Arg Ile Ile Phe Ser Glu Ala Phe Arg Lys Leu Gly Arg Lys Thr Gln  
 35 40 45  
 Val His Pro  
 50

<210> 2189  
 <211> 1412  
 <212> DNA  
 <213> Homo sapiens

<400> 2189  
 ntcgcttcat ggtgcgcaat tacgacaacg ccaagtctca gaatgccgag gcttacaccg  
 60  
 cgttcttcca cgcgatgeta gatgcggggg tcaacctgcc gccatcgtgc tttgaggcct  
 120  
 gggtcctctc ggacgctcac gacgacgaag ctttcgaggt tttccgcgcc gccctgccga  
 180  
 gggctgccca ggcggctgcc caggtgatca gtgcctgaca ccgggctgac ttgcaggtc  
 240



50                      55                      60  
 Pro Thr Pro Asp Asp Leu Ala Glu Glu Asp Ser Gly Glu Ala Val Ala  
 65                      70                      75                      80  
 Ala Trp Gly Arg Leu Gly Tyr Pro Arg Arg Ala Leu Arg Leu His Ser  
                     85                      90                      95  
 Cys Ala Val Thr Ile Ala Thr Glu His Asp Gly Gly Val Pro Asn Ser  
                     100                      105                      110  
 Asp Asp Glu Leu Val Ala Leu Pro Gly Ile Gly Asp Tyr Thr Ala Ser  
                     115                      120                      125  
 Ala Val Val Ser Phe Ala Phe Gly Gly Arg Ala Thr Val Leu Asp Thr  
                     130                      135                      140  
 Asn Val Arg Arg Leu Ile Ala Arg Ala Glu Ser Gly Ile Ala Asn Cys  
 145                      150                      155                      160  
 Pro Thr Ser Val Thr Arg Ala Glu Arg Val Val Ala Asp Ala Leu Val  
                     165                      170                      175  
 Pro Asp Glu Asp Val Arg Ala Ala Lys Trp Ala Val Ala Ser Met Glu  
                     180                      185                      190  
 Leu Gly Ala Leu Val Cys Thr Ala Arg Ser Pro Gln Cys Glu Val Cys  
                     195                      200                      205  
 Pro Ile Arg Asp Gly Cys Arg Trp Val Ile Asp Gly Arg Pro Asp Asn  
                     210                      215                      220  
 Ala Pro Ala Arg Arg Gly Gln Pro Trp Lys Gly Thr Asp Arg Gln Cys  
 225                      230                      235                      240  
 Arg Gly Val Ile Met Asp Val Val Arg Asn Ser Pro His Gly Val Lys  
                     245                      250                      255  
 Val Gln Met Ala Leu Ser Ala Trp Pro Glu Leu Asp Gln Ala Ser Arg  
                     260                      265                      270  
 Cys Leu Glu Ser Leu Leu Asp Asp Gly Leu Val His Arg Arg Gly Asn  
                     275                      280                      285  
 Leu Ile Ser Leu  
 290

<210> 2191  
 <211> 502  
 <212> DNA  
 <213> Homo sapiens

<400> 2191  
 nnacgcgtcg agaattctcta ctctgccccg aacaacgtcc ggcttcgtca ggctcacgat  
 60  
 gactcccttg acgacgacac catttcgggg ggtagccac attggtgctg cctcatggac  
 120  
 tacattgaat cccgttcaat cctgaacggc gttcaggacg tctccagtct cggaaggacc  
 180  
 agagtattgc tgaatctagc cgacatgacc gaacgcggcc tgagggggga gtccattacc  
 240  
 cgcgaggagg ccttcgagat tcttcgcagc agtgatgatg agtcatgtc aatcatcgcc  
 300  
 gccgcggaa aagtgcgtcg ccactttttc gataaccggg ttcgcctcaa ctacctggtc  
 360  
 aacctcaagt ccggcctgtg tcccgaagac tgctcctatt gctcgcagcg tctgggatcg  
 420  
 cgtgccgaga tcacgaaata ctctggggcc gatccgcaga aggtacacga cgccgtcgag  
 480

gctggggattg ccggtgggtgc ac  
502

<210> 2192  
<211> 104  
<212> PRT  
<213> Homo sapiens

<400> 2192  
Leu Asn Leu Ala Asp Met Thr Glu Arg Gly Leu Arg Gly Glu Ser Ile  
1 5 10 15  
Thr Arg Glu Glu Ala Leu Glu Ile Leu Arg Ser Ser Asp Asp Glu Leu  
20 25 30  
Met Ser Ile Ile Ala Ala Ala Gly Lys Val Arg Arg His Phe Phe Asp  
35 40 45  
Asn Arg Val Arg Leu Asn Tyr Leu Val Asn Leu Lys Ser Gly Leu Cys  
50 55 60  
Pro Glu Asp Cys Ser Tyr Cys Ser Gln Arg Leu Gly Ser Arg Ala Glu  
65 70 75 80  
Ile Thr Lys Tyr Ser Trp Ala Asp Pro Gln Lys Val His Asp Ala Val  
85 90 95  
Glu Ala Gly Ile Ala Gly Gly Ala  
100

<210> 2193  
<211> 321  
<212> DNA  
<213> Homo sapiens

<400> 2193  
ccatgggggaa tgcagagcac ggacagtcac acagactgtc ctctctggcc ttctggaccc  
60  
aacatactcc tcttgccaac tgggtattac tggaccttac tgggccttac tggacccaac  
120  
atactcctct tgccaactgg ggatttaaaa attttaaaag cccctttatc tccctccaca  
180  
agtcactgtac tgccaacagg gacacactgt tttctttgga aaccctgctg tgtgcccaga  
240  
cagaggtccc actgccttgg gacagctccc ttgcctanag gggaaggagg gtgtgtgtgc  
300  
tgtgtgtgtt taggttgggg a  
321

<210> 2194  
<211> 106  
<212> PRT  
<213> Homo sapiens

<400> 2194  
Met Gly Asn Ala Glu His Gly Gln Ser His Arg Leu Ser Ser Leu Ala  
1 5 10 15  
Phe Trp Thr Gln His Thr Pro Leu Ala Asn Trp Val Leu Leu Asp Leu  
20 25 30  
Thr Gly Pro Tyr Trp Thr Gln His Thr Pro Leu Ala Asn Trp Gly Phe

```

      35              40              45
Lys Asn Phe Lys Ser Pro Phe Ile Ser Leu His Lys Ser Cys Thr Ala
  50              55              60
Asn Arg Asp Thr Leu Phe Ser Leu Glu Thr Leu Leu Cys Ala Gln Thr
  65              70              75              80
Glu Val Pro Leu Pro Trp Asp Ser Ser Leu Ala Xaa Arg Gly Arg Arg
      85              90              95
Val Cys Val Leu Cys Val Phe Arg Leu Gly
      100              105

```

<210> 2195  
 <211> 504  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2195
naccggtctc cctacatcaa tgcccaccgc gattgcacct ttgttgcacat gtcacctggc
  60
gacgggtgtgg cacaccccaa ctttggcaat atcgccacacg acctgggtgct gttgcacagc
  120
ctgggtgtgc gtctggtact ggtccacggc tcgcgcccgc agatcgacag ccgccttgag
  180
gcacgaggcc tgggtgccga ttaccacaag ggcattgcgtg tcaccgatgc atcaacgctc
  240
gaatgcgtga tcgatgctgt cgggcaactg cgcattgcga ttgaagcgcg cttgtcgatg
  300
gacatggcgt cttcgccaat gcagggttcg cgtctgcgcg tagccagcgg caacctggtc
  360
actgcgcggc cgatcggcgt gctcgacggc gtggattttc accataccgg cgaagtgcgc
  420
cgggtggacc gcaagggcat caaccgcctg ctcgatgagc gctcgattgt gctgctgtcg
  480
cccttgggtt actcgccac cggt
  504

```

<210> 2196  
 <211> 168  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2196
Xaa Ala Ser Pro Tyr Ile Asn Ala His Arg Asp Cys Thr Phe Val Val
  1      5      10      15
Met Leu Pro Gly Asp Gly Val Ala His Pro Asn Phe Gly Asn Ile Val
      20      25      30
His Asp Leu Val Leu Leu His Ser Leu Gly Val Arg Leu Val Leu Val
      35      40      45
His Gly Ser Arg Pro Gln Ile Asp Ser Arg Leu Glu Ala Arg Gly Leu
      50      55      60
Val Pro Tyr Tyr His Lys Gly Met Arg Val Thr Asp Ala Ser Thr Leu
      65      70      75      80
Glu Cys Val Ile Asp Ala Val Gly Gln Leu Arg Ile Ala Ile Glu Ala
      85      90      95
Arg Leu Ser Met Asp Met Ala Ser Ser Pro Met Gln Gly Ser Arg Leu

```



```

      100      105      110
Arg Val Ala Ser Gly Asn Leu Val Thr Ala Arg Pro Ile Gly Val Leu
      115      120      125
Asp Gly Val Asp Phe His His Thr Gly Glu Val Arg Arg Val Asp Arg
      130      135      140
Lys Gly Ile Asn Arg Leu Leu Asp Glu Arg Ser Ile Val Leu Leu Ser
145      150      155      160
Pro Leu Gly Tyr Ser Pro Thr Gly
      165

```

<210> 2197  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2197
acaagtcctg cgacgattcg ctttccggag gcgggcccag gaatggtaat gaaacccgag
60
ttatggggcc ctgcgctcga cgagattgcc gcgggaaaac gtgccggagg ggctgaacag
120
ttagattccg cagtgcagca catccacggg gctactcacg ataaactgtc cgggtgctgtt
180
ccgaaacgct acgatggctg ggatgtcttg gcaggcgagg acccgaatgc accgttgcgtg
240
cttgtgccta gcccggtcgg tgcagtgttt agtcaaaata aggcacaagc ctggtccaat
300
gaagaccaca ttgtttttgc ctgtgggcgc tatgaaggta ttgatcaacg c
351

```

<210> 2198  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2198
Thr Ser Pro Ser Thr Ile Arg Phe Pro Glu Ala Gly Pro Gly Met Val
1      5      10      15
Met Lys Pro Glu Leu Trp Gly Pro Ala Leu Asp Glu Ile Ala Ala Gly
20      25      30
Lys Arg Ala Gly Gly Ala Glu Gln Leu Asp Ser Ala Val Gln His Ile
35      40      45
His Gly Ala Thr His Asp Lys Leu Ser Gly Ala Val Pro Lys Arg Tyr
50      55      60
Asp Gly Arg Asp Val Leu Ala Gly Glu Asp Pro Asn Ala Pro Leu Leu
65      70      75      80
Leu Val Pro Ser Pro Ala Gly Ala Val Phe Ser Gln Asn Lys Ala Gln
85      90      95
Ala Trp Ser Asn Glu Asp His Ile Val Phe Ala Cys Gly Arg Tyr Glu
100      105      110
Gly Ile Asp Gln Arg
115

```

<210> 2199  
 <211> 457

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2199

agacgccggc cgccaagatc tgcattcccta ggccacgcta agaccctggg gaagagcgca  
 60  
 ggagccccgg agaagggctg gaaggagggg actggacgtg cggagaattc cccctaaaa  
 120  
 ggcagaagcc cccgccccca cctcccgagc tccgttcggg cagagcgctt gcctgcctgc  
 180  
 cgttgctggg ggcgcccacc tcgcccagcc atgccaggcc cggccaccga cgcggggaag  
 240  
 atccctttct gcgacgcca ggaagaaatc cgtgccgggc tcgaaagctc tgagggcggc  
 300  
 ggcggccccg agaggccagg cgcgcggggg cagcggcaga acatcgtctg gaggaatgtc  
 360  
 gtcttgatga gcttgctcca cttggggggc gtgtactccc tgggtgctcat ccccaaagcc  
 420  
 aagccactca ctctgctctg gggtaatcc cgcgggc  
 457

&lt;210&gt; 2200

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2200

Arg	Arg	Arg	Pro	Pro	Arg	Ser	Ala	Ser	Leu	Gly	His	Ala	Lys	Thr	Leu
1				5					10					15	
Gly	Lys	Ser	Ala	Gly	Ala	Arg	Glu	Lys	Gly	Trp	Lys	Glu	Gly	Thr	Gly
			20					25					30		
Arg	Ala	Glu	Asn	Ser	Pro	Leu	Lys	Gly	Arg	Ser	Pro	Arg	Pro	His	Pro
		35					40				45				
Pro	Ser	Ser	Val	Arg	Ala	Glu	Arg	Leu	Pro	Ala	Cys	Arg	Cys	Trp	Gly
		50				55					60				
Arg	Pro	Pro	Arg	Pro	Ala	Met	Pro	Gly	Pro	Ala	Thr	Asp	Ala	Gly	Lys
65					70				75					80	
Ile	Pro	Phe	Cys	Asp	Ala	Lys	Glu	Glu	Ile	Arg	Ala	Gly	Leu	Glu	Ser
			85					90						95	
Ser	Glu	Gly	Gly	Gly	Gly	Pro	Glu	Arg	Pro	Gly	Ala	Arg	Gly	Gln	Arg
			100					105					110		
Gln	Asn	Ile	Val	Trp	Arg	Asn	Val	Val	Leu	Met	Ser	Leu	Leu	His	Leu
		115				120						125			
Gly	Ala	Val	Tyr	Ser	Leu	Val	Leu	Ile	Pro	Lys	Ala	Lys	Pro	Leu	Thr
		130				135					140				
Leu	Leu	Trp	Gly	Lys	Ser	Arg	Arg								
145						150									

&lt;210&gt; 2201

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2201

agtactgcga tggacagcta tgcgtggat ggtggtcgca aattacatgt ttgtggtaac  
 60  
 aaccttgatt gcgatggta tgaagtcgaa gaaggcgaat tcaagatcaa gggttatgat  
 120  
 ggtccgacta tcccatgcga taaatgtgat ggtgagatgc agcttaaaac gggtcgtttt  
 180  
 ggtccatatt tcgcatgtac tagctgtgac aatactcgta aggtactcaa gagtgggtcaa  
 240  
 cctgctccgc cacgtgtaga cccaatcaaa atggagcatc tacgttcaac gaagcatgat  
 300  
 gatttcttcg tcttacgtga gggcgctgct ggttta  
 336

<210> 2202

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2202

Ser	Thr	Ala	Met	Asp	Ser	Tyr	Val	Val	Asp	Gly	Gly	Arg	Lys	Leu	His
1				5					10					15	
Val	Cys	Gly	Asn	Asn	Pro	Asp	Cys	Asp	Gly	Tyr	Glu	Val	Glu	Glu	Gly
			20					25					30		
Glu	Phe	Lys	Ile	Lys	Gly	Tyr	Asp	Gly	Pro	Thr	Ile	Pro	Cys	Asp	Lys
		35				40					45				
Cys	Asp	Gly	Glu	Met	Gln	Leu	Lys	Thr	Gly	Arg	Phe	Gly	Pro	Tyr	Phe
	50				55					60					
Ala	Cys	Thr	Ser	Cys	Asp	Asn	Thr	Arg	Lys	Val	Leu	Lys	Ser	Gly	Gln
65					70				75					80	
Pro	Ala	Pro	Pro	Arg	Val	Asp	Pro	Ile	Lys	Met	Glu	His	Leu	Arg	Ser
				85				90						95	
Thr	Lys	His	Asp	Asp	Phe	Phe	Val	Leu	Arg	Glu	Gly	Ala	Ala	Gly	Leu
			100					105					110		

<210> 2203

<211> 273

<212> DNA

<213> Homo sapiens

<400> 2203

ctcgagagat gcagatccag ccgggggtggg aagctgtgca gacagccccg gatctgggac  
 60  
 gtgatggaaa actcaacaga ctggttcaga tcttggtccg gagcccagag gcaccgggga  
 120  
 ccccagggc tgtttctccc tggccacacc agtaccacac ttccaaatgc cctgtagggtg  
 180  
 accaccaggc cacacaggcc cgtctgaggg gccacaggct gtgcaccatg ggacgcaggc  
 240  
 ctgtccctgc ctccctccga tgctctgatg gtg  
 273

<210> 2204

<211> 88

<212> PRT

<213> Homo sapiens

<400> 2204

```

Met Gln Ser Gln Pro Gly Trp Glu Ala Val Gln Thr Ala Pro Asp Leu
 1             5             10             15
Gly Arg Asp Gly Lys Leu Asn Arg Leu Val Gln Ile Leu Ala Arg Ser
 20             25             30
Pro Glu Ala Pro Gly Thr Pro Arg Ala Val Ser Pro Trp Pro His Gln
 35             40             45
Tyr Pro Thr Ser Lys Cys Pro Val Gly Asp His Gln Ala Thr Gln Ala
 50             55             60
Arg Leu Arg Gly His Arg Leu Cys Thr Met Gly Arg Arg Pro Val Pro
 65             70             75             80
Ala Ser Leu Arg Cys Pro Asp Gly
                        85

```

<210> 2205

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2205

```

gnnnnnngng nnnnactggt gtgcatgggt aaaatcctgc aagctactgg gttgccacag
60
catctgtccc actttgtggt ctgcaaatac agcttctggg atcaacagga gccggtgatt
120
gtcgtcctcg aagtggacac ctctcctct tccgtcagca aggagccgca ctgcatgggt
180
gtctttgatc attgcaatga gttttctggt aacatcaccc aagactttat cgagcatctt
240
tccgaaggag cattggcaat tgaagtatat ggacataaaa taaacgatcc ccggaaaaac
300
cccgccctgt gggatttggg aatcatccaa gcaaagacac gtagtcttcg ggacagatgg
360
agtgaagtgc ccaggaaatt ggaattc
387

```

<210> 2206

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2206

```

Xaa Xaa Gly Xaa Xaa Leu Val Cys Met Val Lys Ile Leu Gln Ala Thr
 1             5             10             15
Gly Leu Pro Gln His Leu Ser His Phe Val Phe Cys Lys Tyr Ser Phe
 20             25             30
Trp Asp Gln Gln Glu Pro Val Ile Val Ala Pro Glu Val Asp Thr Ser
 35             40             45
Ser Ser Ser Val Ser Lys Glu Pro His Cys Met Val Val Phe Asp His
 50             55             60
Cys Asn Glu Phe Ser Val Asn Ile Thr Glu Asp Phe Ile Glu His Leu
 65             70             75             80
Ser Glu Gly Ala Leu Ala Ile Glu Val Tyr Gly His Lys Ile Asn Asp

```

85 90 95  
 Pro Arg Lys Asn Pro Ala Leu Trp Asp Leu Gly Ile Ile Gln Ala Lys  
 100 105 110  
 Thr Arg Ser Leu Arg Asp Arg Trp Ser Glu Val Pro Arg Lys Leu Glu  
 115 120 125  
 Phe

<210> 2207  
 <211> 667  
 <212> DNA  
 <213> Homo sapiens

<400> 2207  
 atctccaacc ccgagaccct ctccaatata gccggcttcg agggctacat cgacctgggc  
 60  
 cgcgagctct ccagcctgca ctactgctc tgggaggccg tcagccagct ggagcagagc  
 120  
 atagtatcca aactgggacc cctgcctcgg atcctgaggg acgtccacac agcactgagc  
 180  
 accccaggta gcgggcagct cccagggacc aatgacctgg cctccacacc gggctctggc  
 240  
 agcagcagca tctcagctgg gctgcagaag atggtgattg agaacgatct ttccggtctg  
 300  
 atagatttca cccggttacc gtctccaacc cccgaaaaca aggacttggt ttttgtcaca  
 360  
 aggtcctccg ggggccagcc ctacactgcc cgcagctcga gttactcgga agccaacgag  
 420  
 cctgatcttc agatggccaa cgggtggcaag agcctctcca tgggtggacct ccaggacgcc  
 480  
 cgcacgctgg atggggaggc aggtcccccg gcggggcccc acgtcctccc cacagatggg  
 540  
 caggccgctg cagctcagct ggtggccggg tggccggccc gggcaacccc agtgaacctg  
 600  
 gcagggtgg ccacgggtgcg gcgggcaggc cagacaccaa ccacaccagg cacctccgag  
 660  
 ggcgcgc  
 667

<210> 2208  
 <211> 222  
 <212> PRT  
 <213> Homo sapiens

<400> 2208  
 Ile Ser Asn Pro Glu Thr Leu Ser Asn Thr Ala Gly Phe Glu Gly Tyr  
 1 5 10 15  
 Ile Asp Leu Gly Arg Glu Leu Ser Ser Leu His Ser Leu Leu Trp Glu  
 20 25 30  
 Ala Val Ser Gln Leu Glu Gln Ser Ile Val Ser Lys Leu Gly Pro Leu  
 35 40 45  
 Pro Arg Ile Leu Arg Asp Val His Thr Ala Leu Ser Thr Pro Gly Ser  
 50 55 60  
 Gly Gln Leu Pro Gly Thr Asn Asp Leu Ala Ser Thr Pro Gly Ser Gly

```

65          70          75          80
Ser Ser Ser Ile Ser Ala Gly Leu Gln Lys Met Val Ile Glu Asn Asp
          85          90          95
Leu Ser Gly Leu Ile Asp Phe Thr Arg Leu Pro Ser Pro Thr Pro Glu
          100          105          110
Asn Lys Asp Leu Phe Phe Val Thr Arg Ser Ser Gly Val Gln Pro Ser
          115          120          125
Pro Ala Arg Ser Ser Ser Tyr Ser Glu Ala Asn Glu Pro Asp Leu Gln
          130          135          140
Met Ala Asn Gly Gly Lys Ser Leu Ser Met Val Asp Leu Gln Asp Ala
145          150          155          160
Arg Thr Leu Asp Gly Glu Ala Gly Ser Pro Ala Gly Pro Asp Val Leu
          165          170          175
Pro Thr Asp Gly Gln Ala Ala Ala Gln Leu Val Ala Gly Trp Pro
          180          185          190
Ala Arg Ala Thr Pro Val Asn Leu Ala Gly Leu Ala Thr Val Arg Arg
          195          200          205
Ala Gly Gln Thr Pro Thr Thr Pro Gly Thr Ser Glu Gly Ala
          210          215          220

```

&lt;210&gt; 2209

&lt;211&gt; 353

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2209

```

ngggaagttg gtactagcct cccaaagcca ctctcctgag tgacattgag agcatcctat
60
agagaaggcc atgagagaga tagcactggg acagatgggtg tcagcagagg ggactccaga
120
ccacagcaga agtgaccaag ctgtagcttc cttagatggc cccaagggtg ggagggttca
180
cacagcagag cctgggtctg gaggcacctt ggggatgttt ttccccatta ggcccctgag
240
ctctatggaa gcacttaact gcctgttccc cgcttattct gtgtttaaac caaggaaaca
300
acatgcctgg ggtctgaaat cctggattca aatcctgact gtgttggtgtg ctt
353

```

&lt;210&gt; 2210

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2210

```

Met Arg Glu Ile Ala Leu Gly Gln Met Val Ser Ala Glu Gly Thr Pro
1      5      10      15
Asp His Ser Arg Ser Asp Gln Ala Val Ala Ser Leu Asp Gly Pro Lys
20     25     30
Gly Gly Arg Leu His Thr Ala Glu Pro Gly Ser Gly Gly Thr Leu Gly
35     40     45
Met Phe Phe Pro Ile Arg Pro Leu Ser Ser Met Glu Ala Leu Asn Cys
50     55     60
Leu Phe Pro Ala Tyr Ser Val Phe Lys Pro Arg Lys Gln His Ala Trp

```

65                   70                   75                   80  
Gly Leu Lys Ser Trp Ile Gln Ile Leu Thr Val Leu Cys Ala  
               85                   90

```
<210> 2211
<211> 493
<212> DNA
<213> Homo sapiens
```

```
<400> 2211
ctgaccacat ctccgacgat cctagacctc tgttctgcat ctccgacacc accgactgct
60
cactgtaccc tgggactgca cagagggaaa cgattaccaa acccagagac ggggaccgga
120
aggaaggagg ggaaggggat ggatccatgt actttggggt tggagaaatg ggggacagca
180
agtctcctca acccaaatac agccccctg ggaggctcct gccccgtctc tgtggatagt
240
gagcccagct gcaagggcgg cctgccaggg acaaaccac caaaaggaaa gatgtttag
300
aaccaaagag aggctccctg aaagaggcgt ctcccggggc ctccaagccc gggagcgccc
360
ggcggacagg gggcagtggc caagtctgtg cggaccctga ccgctcaga gaacgagagc
420
atgcgcaaag tcatgcccac caccaagtcc agcagaggcg ccggctggag gcgaccagag
480
ctgtcatccc ggg
493
```

```
<210> 2212
<211> 126
<212> PRT
<213> Homo sapiens
```

<400> 2212															
Met	Gly	Met	Thr	Leu	Arg	Met	Leu	Ser	Phe	Ser	Glu	Ala	Val	Arg	Val
1				5					10					15	
Arg	Thr	Asp	Leu	Ala	Thr	Ala	Pro	Cys	Pro	Pro	Gly	Ala	Pro	Gly	Leu
			20					25					30		
Gly	Gly	Pro	Gly	Arg	Arg	Leu	Phe	Gln	Gly	Ala	Ser	Leu	Trp	Phe	Tyr
		35					40					45			
Asn	Ile	Phe	Pro	Phe	Gly	Gly	Phe	Val	Pro	Gly	Arg	Pro	Pro	Leu	Gln
	50					55					60				
Leu	Gly	Ser	Leu	Ser	Thr	Glu	Thr	Gly	Gln	Glu	Pro	Pro	Arg	Gly	Ala
65					70					75				80	
Val	Phe	Gly	Leu	Arg	Arg	Leu	Ala	Val	Pro	His	Phe	Ser	Asn	Pro	Lys
				85					90				95		
Val	His	Gly	Ser	Ile	Pro	Phe	Pro	Ser	Phe	Leu	Pro	Val	Pro	Val	Ser
			100					105					110		
Gly	Phe	Gly	Asn	Arg	Phe	Pro	Leu	Cys	Ser	Pro	Arg	Val	Gln		
		115					120					125			

<210> 2213  
<211> 327

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2213

acgcgtccga ccggcagttc cggcagctgc gggaaagctg cgatgcgctc gccgagcatt  
 60  
 gccggtgctt cgacacactg ggttatatcg cctcaaagc acaggtctac gaaggttctg  
 120  
 acggaaggcc cggccaatcc gatcgcggcc tcggcgctgc gcatcatccg ggcgcgctg  
 180  
 tcgcagctct ggggcacgtc gctgctccgc aacggacggg cggaacagag tgtggtggag  
 240  
 atcgcccggt tggtcgacgc gatcacgtca cgggacgagg aagccgccca gcgtgcactg  
 300  
 ctcgaccaca atcgacgcgc gttggaa  
 327

&lt;210&gt; 2214

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2214

Met	Arg	Ser	Pro	Ser	Ile	Ala	Gly	Ala	Ser	Thr	His	Trp	Val	Ile	Ser
1				5				10					15		
Pro	Ser	Lys	His	Arg	Ser	Thr	Lys	Val	Leu	Thr	Glu	Gly	Pro	Ala	Asn
		20					25					30			
Pro	Ile	Ala	Ala	Ser	Ala	Leu	Arg	Ile	Ile	Arg	Ala	Arg	Val	Ser	Gln
	35					40					45				
Leu	Trp	Gly	Thr	Ser	Leu	Leu	Arg	Asn	Gly	Arg	Ala	Glu	Gln	Ser	Val
	50				55					60					
Val	Glu	Ile	Ala	Arg	Leu	Val	Asp	Ala	Ile	Thr	Ser	Arg	Asp	Glu	Glu
65				70				75					80		
Ala	Ala	Gln	Arg	Ala	Leu	Leu	Asp	His	Asn	Arg	Ser	Ala	Leu	Glu	
			85					90					95		

&lt;210&gt; 2215

&lt;211&gt; 430

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2215

ctggggatca tgccctacat cactgcgtcg atcatcctgc agctgctgac agtcgtgac  
 60  
 ccgaagctgg aaacccttaa gaaggagggc gcgtccggtc agaacaagat caccagtag  
 120  
 acccggtacc tcaactctcg gcttgacctg ttgcaggcaa cggccttcgt cacgcttgcc  
 180  
 acctccggcc gtctattcac cnntgcagct ntgccagtcg tctactccac ctcggtcttc  
 240  
 gaagtcgtcg tcatgatcct gactatgacg gccggtagca ccatcgatcat gtggatgggt  
 300  
 gagctcatca ccgaccgcgg tatcggaac ggtatgtcga tcatgatttt cactcagatt  
 360



geggcgcggtt tccctgactc gctgtgggtct atcaaggctc ctcgaaatgg cgccgggtcag  
 420  
 gctcacgcgt  
 430

<210> 2216  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 2216  
 Leu Gly Ile Met Pro Tyr Ile Thr Ala Ser Ile Ile Leu Gln Leu Leu  
 1 5 10 15  
 Thr Val Val Ile Pro Lys Leu Glu Thr Leu Lys Lys Glu Gly Ala Ser  
 20 25 30  
 Gly Gln Asn Lys Ile Thr Gln Tyr Thr Arg Tyr Leu Thr Leu Val Leu  
 35 40 45  
 Gly Leu Leu Gln Ala Thr Ala Phe Val Thr Leu Ala Thr Ser Gly Arg  
 50 55 60  
 Leu Phe Thr Xaa Ala Ala Xaa Pro Val Val Tyr Ser Thr Ser Val Phe  
 65 70 75 80  
 Glu Val Val Val Met Ile Leu Thr Met Thr Ala Gly Thr Thr Ile Val  
 85 90 95  
 Met Trp Met Gly Glu Leu Ile Thr Asp Arg Gly Ile Gly Asn Gly Met  
 100 105 110  
 Ser Ile Met Ile Phe Thr Gln Ile Ala Ala Arg Phe Pro Asp Ser Leu  
 115 120 125  
 Trp Ser Ile Lys Val Ala Arg Asn Gly Ala Gly Gln Ala His Ala  
 130 135 140

<210> 2217  
 <211> 444  
 <212> DNA  
 <213> Homo sapiens

<400> 2217  
 accagggccg cttcgaagga cctctctcca gctatcgtga cgacgacggc gaagcgggct  
 60  
 atgacgtggc tcgatgacga cgtgggcgcc gacctgttga atcaggetga ttccatggac  
 120  
 catgccctgg aggccaccgt cccaggtcgg gtcaccacgc cggacgccca agtcatccag  
 180  
 acctgtgccg tgttgcgtag ccttgcctgc gtggcagtca gccagctggg ccgaaatgac  
 240  
 gaggactcta gggaaccagt cgatgcggag agagtacagg ctcaagcgnc gatgcgggag  
 300  
 gttttcgaga ccgccgaacg catggtgggg ctggccgccg ccgacgtggt gtgggtctct  
 360  
 gagtctgaga agggataccg cagcattcac gtcgctccgc tgagtgttgg cggcttgcta  
 420  
 cgagagaatg tctttgctca gtcc  
 444

<210> 2218

<211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 2218  
 Thr Arg Ala Ala Ser Lys Asp Leu Ser Pro Ala Ile Val Thr Thr Thr  
 1 5 10 15  
 Ala Lys Arg Ala Met Thr Trp Leu Asp Asp Asp Val Gly Ala Asp Leu  
 20 25 30  
 Leu Asn Gln Ala Asp Ser Met Asp His Ala Leu Glu Ala Thr Val Pro  
 35 40 45  
 Gly Arg Val Thr Thr Pro Asp Ala Gln Val Ile Gln Thr Cys Ala Val  
 50 55 60  
 Leu Arg Asp Leu Ala Arg Val Ala Val Ser Gln Leu Gly Arg Asn Asp  
 65 70 75 80  
 Glu Asp Ser Arg Glu Pro Val Asp Ala Glu Arg Val Gln Ala Gln Ala  
 85 90 95  
 Xaa Met Arg Glu Val Phe Glu Thr Ala Glu Arg Met Val Gly Leu Ala  
 100 105 110  
 Ala Ala Asp Val Val Trp Val Ser Glu Ser Glu Lys Gly Tyr Arg Ser  
 115 120 125  
 Ile His Val Ala Pro Leu Ser Val Gly Gly Leu Leu Arg Glu Asn Val  
 130 135 140  
 Phe Ala Gln Ser  
 145

<210> 2219  
 <211> 688  
 <212> DNA  
 <213> Homo sapiens

<400> 2219  
 acgcgtaccg tcgttgccat gagcgctcctg ccactggaaa ttggctgtc attcagctac  
 60  
 ggcattacga atatggcgtg gatgtggcta tggttcgacg agcccgga aa ccgttgggag  
 120  
 tggtcgatcc ttttccccgc tgggtggctg accagcgctt tggtcagtca ggggttcggt  
 180  
 ggaatgttcc atagtgtgca gattgcgcgt catgtcagca gttaccacgg catcatggtc  
 240  
 gctttcgcgc tcgttgggta cggatggctt gcgatgcaca acttgcgtca ccctgatgag  
 300  
 cgctattcga ttcgctcggc cttgataatc ggcatcggca tccagttcac ctgggaggca  
 360  
 gtgctgatga tctcgggtat caggccgttg acatggcgcc cgcttggtat cgattctctc  
 420  
 atcgagacga atctcggcgc tccgttcatg ttgctcattg tgaaagcttg gcgcgcgcca  
 480  
 cccgaaggaa ttcctggtc taccagtccg cgcgcgaccg cccgtggcac agcgcgagtc  
 540  
 tatatgaggg atgatcttgt ttctcgacgc cttctacagc gtcccttgaga gcctctgcga  
 600  
 gcgaagggcg cgggtgtagg tctccccggg gctcgttgtg gtccctctctc tgctgacgc  
 660

agagccgtgt gatgaggcga agtcatga  
688

<210> 2220

<211> 189

<212> PRT

<213> Homo sapiens

<400> 2220

```

Met Ser Val Leu Pro Leu Glu Ile Trp Leu Ser Phe Ser Tyr Gly Ile
 1           5           10           15
Thr Asn Met Ala Trp Met Trp Leu Trp Phe Asp Glu Pro Gly Asn Arg
      20           25           30
Trp Glu Trp Ser Ile Leu Phe Pro Ala Gly Trp Leu Thr Ser Ala Leu
      35           40           45
Val Ser Gln Gly Phe Gly Gly Met Phe His Ser Val Gln Ile Ala Arg
      50           55           60
His Val Ser Ser Tyr His Gly Ile Met Val Ala Phe Ala Leu Val Gly
65           70           75           80
Tyr Gly Trp Leu Ala Met His Asn Leu Arg His Pro Asp Glu Arg Tyr
      85           90           95
Ser Ile Arg Ser Ala Leu Ile Ile Gly Ile Gly Ile Gln Phe Thr Trp
      100          105          110
Glu Ala Val Leu Met Ile Ser Gly Ile Arg Pro Leu Thr Trp Arg Pro
      115          120          125
Leu Val Ile Asp Ser Leu Ile Glu Thr Asn Leu Gly Ala Pro Phe Met
      130          135          140
Leu Leu Ile Val Lys Ala Trp Arg Ala Pro Pro Glu Gly Ile Pro Gly
145          150          155          160
Ser Thr Ser Pro Arg Pro Thr Ala Arg Gly Thr Ala Arg Val Tyr Met
      165          170          175
Arg Asp Asp Leu Val Ser Arg Arg Leu Leu Gln Arg Pro
      180          185

```

<210> 2221

<211> 530

<212> DNA

<213> Homo sapiens

<400> 2221

```

actagtgtag ctgcaatata tactcgggat ttactacagt taagccttat ccttcacccc
60
aaagaagagc aaaccgccat cgctaacgtc ctttcgcaca tggacaccga actcgacgcc
120
ctacaacaac gcctcagtaa aaccaaacc atcaagcaag gcatgatgca agaactactc
180
acaggggaaaa cgagggttggt atgagccaca aggtgaattt agtgcacgag ctggataagc
240
gtattatctc ggtaaatacg ttattgtcac agcctgagct tgctattccg gcttatcagc
300
ggccttataa atggtcacaa gagaacctaa atgcgctgat gagtgattta cgaatttatc
360
gtaacaaatc ggcttatcgg ctggggacgg tggtttttca ttatcataat gaaccgctag
420

```

acaacgagaa taccacaag ctggatattg tagacgggtca gcaacgtacc ttaacctgt  
 480  
 tgctgctagt caaagccatt ttagaagaac ggttgtctgc gttaacgcgt  
 530

<210> 2222  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens

<400> 2222  
 Thr Ser Val Ala Ala Ile Tyr Thr Arg Asp Leu Leu Gln Leu Ser Leu  
 1 5 10 15  
 Ile Leu Pro Pro Lys Glu Glu Gln Thr Ala Ile Ala Asn Val Leu Ser  
 20 25 30  
 Asp Met Asp Thr Glu Leu Asp Ala Leu Gln Gln Arg Leu Ser Lys Thr  
 35 40 45  
 Lys Thr Ile Lys Gln Gly Met Met Gln Glu Leu Leu Thr Gly Lys Thr  
 50 55 60  
 Arg Leu Val  
 65

<210> 2223  
 <211> 482  
 <212> DNA  
 <213> Homo sapiens

<400> 2223  
 cgccgcgcgc ggtagtgcgc cctgcgtcgc tggcgtaatg gaaaatgctg cgctgggttg  
 60  
 acaggcgcca gacattgttg tggacgatgc cgctgtcgat cgggtggcacg ccgggtgaaga  
 120  
 tgcatttatc caacggccgc gacagggccg gcagttcaca gtccagtttg taaagcgctg  
 180  
 cgcgtcctgc gctgatatag gcctggagat gccccatggc gtgtcgggca acctcgtagt  
 240  
 tcaggccgctc gagcaccaca aggatgacgt tgtgcttcat aaggggagac gctccgcaac  
 300  
 gataggcttg actcatttca cttgaggaac ggggtcaaaa ctgtgggcgc gggcaagccc  
 360  
 gctcccacac aagcccgctc ccacattgga tctccaatgt gggctacagc cttactgcat  
 420  
 attgatgatg acttcttctt gccacttctg cggcagtgcc ttggaggtct tttcccacgc  
 480  
 gt  
 482

<210> 2224  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2224  
 Met Ser Gln Ala Tyr Arg Cys Gly Ala Ser Pro Leu Met Lys His Asn

1	5	10	15
Val Ile Leu	Val Val Leu Asp Gly Leu Asn Tyr Glu Val Ala Arg His		
	20	25	30
Ala Met Gly His Leu Gln Ala Tyr Ile Ser Ala Gly Arg Ala Ala Leu			
	35	40	45
Tyr Lys Leu Asp Cys Glu Leu Pro Ala Leu Ser Arg Pro Leu Asp Lys			
	50	55	60
Cys Ile Phe Thr Gly Val Pro Pro Ile Asp Ser Gly Ile Val His Asn			
65	70	75	80
Asn Val Ser Arg Leu Ser Asn Gln Arg Ser Ile Phe His Tyr Ala Thr			
	85	90	95
Asp Ala Gly Leu Thr Thr Ala Ala Ala			
	100	105	

&lt;210&gt; 2225

&lt;211&gt; 753

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2225

nacgcgtctg atccacacgg gccactgacg tggcgttatg acagggagcg ggccggtgccc  
 60  
 ggcgatcatcc tcatctcatc gggtcacgga gaggatctcg tccagtatct actcaaaggg  
 120  
 cgattcactg aggtgtccgc cgtgtccgag acgttcatcc gtcagcgtcc caagccactc  
 180  
 aaggagggca tcggccacac aggttgggtc gtctcggacg agctcgggccc ggtgggcaac  
 240  
 gaggattatt gcgctgtcat cgcccgatg gaaaacggag tgatgtgcac cctggagtcc  
 300  
 agtcgggtca gtgttgggccc gcgcgcggag tacatcgtcg agatctatgg aaccgacgga  
 360  
 tcaatccggt ggaacttcga ggaatcgaac catttgcagg tctgtctggg gcgaaacaat  
 420  
 cgtgccctgc agggatatgt caactgcatg gccggaccag acttcccggg gttcatgcgt  
 480  
 ttccaaccgg gagccggaac atccatgggc tttgacgaca tgaaggctcg tgaggctgcg  
 540  
 aaattcgtcc gaggggtctt ggatgggcag caatatggcc catctgtcgc cgatgggttg  
 600  
 gcctcagcgg aggtcaacga tgcgatcgtt gcctcctgcg ggggaccatg cctggcatga  
 660  
 cgtgaagccg gtttcgggga gaaccacgtt cgataagtga ccgcgtcatc gcgtgtctgt  
 720  
 gaccaggcct ggccggcaca ccagggtcgcc ggc  
 753

&lt;210&gt; 2226

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2226

Xaa Ala Ser Asp Pro His Gly Pro Leu Thr Trp Arg Tyr Asp Arg Glu

```

      1           5           10           15
Arg Ala Gly Ala Gly Val Ile Leu Asp Leu Met Gly His Gly Glu Asp
      20           25           30
Leu Val Gln Tyr Leu Leu Lys Gly Arg Phe Thr Glu Val Ser Ala Val
      35           40           45
Ser Glu Thr Phe Ile Arg Gln Arg Pro Lys Pro Leu Lys Glu Gly Ile
      50           55           60
Gly His Thr Gly Trp Val Val Ser Asp Glu Leu Gly Pro Val Gly Asn
      65           70           75           80
Glu Asp Tyr Cys Ala Val Ile Ala Arg Met Glu Asn Gly Val Met Cys
      85           90           95
Thr Leu Glu Ser Ser Arg Val Ser Val Gly Pro Arg Ala Glu Tyr Ile
      100          105          110
Val Glu Ile Tyr Gly Thr Asp Gly Ser Ile Arg Trp Asn Phe Glu Asp
      115          120          125
Leu Asn His Leu Gln Val Cys Leu Gly Arg Asn Asn Arg Ala Leu Gln
      130          135          140
Gly Tyr Val Asn Cys Met Ala Gly Pro Asp Phe Pro Glu Phe Met Arg
      145          150          155          160
Phe Gln Pro Gly Ala Gly Thr Ser Met Gly Phe Asp Asp Met Lys Val
      165          170          175
Val Glu Ala Ala Lys Phe Val Arg Gly Val Leu Asp Gly Gln Gln Tyr
      180          185          190
Gly Pro Ser Val Ala Asp Gly Trp Ala Ser Ala Glu Val Asn Asp Ala
      195          200          205
Ile Val Ala Ser Cys Gly Gly Pro Cys Leu Ala
      210          215

```

&lt;210&gt; 2227

&lt;211&gt; 324

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2227

```

ggatccgaaa cggtgggagc ataaagcagc atggcgccacc tactgaagac ggtggtggct
60
ggctgttcat gtcctttcct tagcaacttg gggctctcta aggttctacc tggaagaga
120
gactttgtac gaacgcttcg tactcaccag gcactgtggt gtaaatcccc ggtaaagcca
180
ggaattccat ataagcagtt gacagttggg gtccccaagg agattttcca aaacgagaag
240
cgagttgcat tgtctctgc ggggggtccag gccctgggtca agcagggctt caatgttgtc
300
gtggaatcag ggcagggcga agct
324

```

&lt;210&gt; 2228

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2228

Met Ala His Leu Leu Lys Thr Val Val Ala Gly Cys Ser Cys Pro Phe

```

      1             5             10             15
Leu Ser Asn Leu Gly Ser Ser Lys Val Leu Pro Gly Lys Arg Asp Phe
      20             25             30
Val Arg Thr Leu Arg Thr His Gln Ala Leu Trp Cys Lys Ser Pro Val
      35             40             45
Lys Pro Gly Ile Pro Tyr Lys Gln Leu Thr Val Gly Val Pro Lys Glu
      50             55             60
Ile Phe Gln Asn Glu Lys Arg Val Ala Leu Ser Pro Ala Gly Val Gln
      65             70             75             80
Ala Leu Val Lys Gln Gly Phe Asn Val Val Glu Ser Gly Ala Gly
      85             90             95
Glu Ala

```

&lt;210&gt; 2229

&lt;211&gt; 320

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2229

```

acgcgtgaag gggccctgtg acgaggtcat ttctgtccat ggggggtcca gatggtgagg
60
ccacacagaga gggaaacgggc ggggggaggg gagagagaaa gacagactca ggcagaaccc
120
tagctcagcc ccttcctgcg tgcctggccc tgggaggatg ccatccccag tcccctcttc
180
tgggccctgc tctggggact cggcacagat ggatecagtg catcctcagc cccctgagaa
240
gctgtgctgc catcagctcc ttctctgggt acagggcacg ggaagcggct gccacgagg
300
cctcggtecc gccaaagtgt
320

```

&lt;210&gt; 2230

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2230

```

Met Gly Gly Pro Asp Gly Glu Ala His Arg Glu Gly Thr Gly Gly Gly
      1             5             10             15
Arg Gly Gly Glu Lys Thr Asp Ser Gly Arg Thr Leu Ala Gln Pro Leu
      20             25             30
Pro Ala Cys Leu Ala Leu Gly Gly Cys His Pro Gln Ser Pro Leu Leu
      35             40             45
Gly Pro Ala Leu Gly Thr Arg His Arg Trp Ile Gln Cys Ile Leu Ser
      50             55             60
Pro Leu Arg Ser Cys Ala Ala Ile Ser Ser Phe Ser Gly Tyr Arg Ala
      65             70             75             80
Arg Glu Ala Ala Ala Gln Gln Ala Ser Val Pro Pro Ser Cys
      85             90

```

&lt;210&gt; 2231

&lt;211&gt; 671

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2231

gggctgtcta ccacgggctt cgggacttgg ggcagcttcc tgagctctct gagctgcagt  
60

tccttcaacc acaaaatgag gagagtgcag gacctcagag gcttactgtg aggatggaga  
120

aaagcccagt tcaatgcccc actgggaaat gcttcccatt aattgtggaa ttgtcgtgcc  
180

catttactgt cggggtgaca gggggggtgg gggtcagagt agagacagga gaaggaagtg  
240

agcatttgtg ggataccac cactgccag ggactgaacc ctatctggat ctctgcagc  
300

cctcccaatg gcactgtgaa gccagtgtt ttttacagat gaggaaactg agatttgtgg  
360

ctataacaga taaacagatg accctgaatg gggcagggtca tgtcatctgc catagataca  
420

tgcatagaac aatgcaaacc agtcagtcct ctctgagtca gaccaggctg accatcaggg  
480

acatgcagac actggcaggg ctggggttgt tccccatcgg tgatagcctg gtgcccccat  
540

ggccctgat gccacaggct gtctggaagg ctgggtcact gctgagaaga caaggagaca  
600

ttttctctca ccagctttct ttttctatt ccttcttaga cacctgagct gcgggtgatca  
660

cagctcttaa g

671

&lt;210&gt; 2232

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2232

Met Glu Lys Ser Pro Val Gln Cys Pro Thr Gly Lys Cys Phe Pro Leu

1 5 10 15

Ile Val Glu Leu Ser Cys Pro Phe Thr Val Gly Val Thr Gly Gly Val

20 25 30

Gly Val Arg Val Glu Thr Gly Glu Gly Ser Glu His Leu Trp Asp Thr

35 40 45

His His Val Pro Gly Thr Glu Pro Tyr Leu Asp Leu Leu Gln Pro Ser

50 55 60

Gln Trp His Cys Glu Ala Ser Val Val Leu Gln Met Arg Lys Leu Arg

65 70 75 80

Phe Val Ala Ile Thr Asp Lys Gln Met Thr Leu Asn Gly Ala Gly His

85 90 95

Val Ile Cys His Arg Tyr Met His Arg Thr Met Gln Thr Ser Gln Ser

100 105 110

Pro Leu Ser Gln Thr Arg Leu Thr Ile Arg Asp Met Gln Thr Leu Ala

115 120 125

Gly Leu Gly Leu Phe Pro Ile Gly Asp Ser Leu Val Pro Pro Trp Pro

130 135 140

Leu Met Pro Thr Ala Val Trp Lys Ala Gly Ser Leu Leu Arg Arg Gln



145                      150                      155                      160  
 Gly Asp Ile Phe Ser His Gln Leu Ser Phe Phe Tyr Ser Phe Leu Asp  
                          165                      170                      175  
 Thr

<210> 2233  
 <211> 6199  
 <212> DNA  
 <213> Homo sapiens

<400> 2233  
 acgcgtgatg atcgggaatg tgaaaatcag ctggttctgc tgcttggttt caacaccttt  
 60  
 gatttcatta aagtgttgcg gcagcacagg atgatgattt tatactgtac cttgctggcc  
 120  
 agtgcacaaa gtgaagctga aaaggaaagg attatgggaa agatggaagc tgaccagag  
 180  
 ctatccaagt tcctctacca gttcatgaa accgagaagg aggatctgat ccgagaggaa  
 240  
 aggtcccagg gagagcgagt gcgtcagtct cgaatggaca cagatctgga aacctggat  
 300  
 ctcgaccagg gtggagaggc actggctcca cggcaggttc tggacttggg ggacctgggt  
 360  
 tttaccaag ggagccactt tatggccaat aaacgctgct agcttcttga tggatcctcc  
 420  
 cgtcgccagc gtaagggcta tgaagaggtg catgtgcctg ctttgaagcc caagcccttt  
 480  
 ggctcagaag aacaattgct cccggtggaa aagctgcca agtatgcca ggctgggttt  
 540  
 gagggcttca aaacgctgaa ccggatccag agtaagctct accgtgctgc ccttgagacg  
 600  
 gatgagaatc tgctgctgtg tgctcctact ggtgctggga agaccaacgt ggccctgatg  
 660  
 tgcattgctc gagagatttg gaaacacata aacatggacg gcacaatcaa tgtggatgac  
 720  
 ttcaagatta tctacatagc tcccatgcgc tccctgggtc aggagatggt gggcagcttt  
 780  
 ggaaagcgcc tggccacata tggcatcact gttgctgagc tgactgggga tcaccagcta  
 840  
 tgcaaggagg aatcagtgct cacacagatt atcgtctgca cccctgagaa gtgggacatc  
 900  
 atcacacgca agggcgggga gcgcacctac acccagctgg tgcgactcat tgtcttggat  
 960  
 gagatccatc ttctacatga tgacagaggt cctgtcttag aagctttggt ggccagggcc  
 1020  
 atccgaaaca ttgagatgac ccaagaagat gtccgactca ttggtctcag tgctaccctc  
 1080  
 cccaactatg aagatgtggc cacctttctg cgagtcgacc ctgctaaggg cctcttctac  
 1140  
 tttgataaca gcttccgccc cgtgcctctg gaacaaacat atgtgggcat cacagagaaa  
 1200  
 aaagctatca aacgtttcca gatcatgaat gaaatagtct atgagaaaat catggaacat  
 1260

gctggaaaaa atcaggtgct cgtgtttgtc cattctcgca aagaaactgg gaagacagca  
1320  
agggcaatcc gtgacatgtg tctggagaag gacacttttg gtctgtttct tcgcgagggg  
1380  
tctgcctcca ctgaagtcct tcgtacagaa gcagagcagt gcaagaactt ggagctgaag  
1440  
gatcttttgc cctatggctt tgctattcat catgcaggca tgactagagt tgaccgaaca  
1500  
ctcgtggagg atctttttgc tgataaacat attcaggttt tagtttccac cgcaactcta  
1560  
gcttgggggtg tgaatctccc tgcacatata gtcacatca aaggcaccca ggtgtacagt  
1620  
ccagagaagg ggcgttggaac agaactggga gcactggaca ttctgcagat gctgggacgt  
1680  
gccggaagac cccagtatga caccaagggt gaaggcatac tcatcacatc tcatggggag  
1740  
ctacagtact acctgtccct cctcaatcaa caacttcccta ttgaaagcca gatggtttca  
1800  
aagcttcctg acatgctcaa tgcagaaatc gtgctaggaa atgtccagaa tgccaaggat  
1860  
gcggtgaact ggctgggcta tgccacctc tatatccgaa tgctgcgac cccaaccctc  
1920  
tatggcatct ctcatgatga cctcaaggga gatcccctgc tggaccagcg ccgactagat  
1980  
ctggttcata cagctgccct gatgctggac aagaacaatc tggtaagta cgacaagaag  
2040  
acgggcaact tccaggtgac agaactgggc cgtatagcca gccactacta catcaccaat  
2100  
gatacagtgc agacttacaa ccagctgctg aagccaccc tgagtggat tgagcttttc  
2160  
agggctctct cattgtctc tgagttcaag aacatcacag tgagagagga ggagaagctg  
2220  
gagctgcaga agttgctgga gaggggtgcct atccctgtaa aggagagcat tgaggaaccc  
2280  
agtgtctaaga tcaacgttct tctgcaagcc ttcattctac agctgaaatt ggagggtttt  
2340  
gcactgatgg ctgacatggt gtatgtcaca cagtcggctg gccggttgat gcgagcgata  
2400  
tttgaattg tctgaaccg aggttgggca cagcttacag acaagaccct gaacctctgc  
2460  
aagatgatcg acaaacgcat gtggcagtcc atgtgtctc tgcgccagt cgggaaactc  
2520  
cctgaggaag tagtgaagaa gattgagaag aagaatttcc cctttgagcg tctgtacgac  
2580  
ctgaatcata atgagattgg ggagcttatc cgcattgcaa agatggggaa gaccatccac  
2640  
aaatatgtcc atctgtttcc caagttggag ttgtcagtgc acctgcagcc tatcacacgc  
2700  
tccaccctga aggtggagct gaccatcacg ccagacttcc agtgggatga aaaggtgcat  
2760  
ggttcatccg aggttttttg gattctggtg gaggatgtgg acagcgaggt gattctgcac  
2820  
catgagtatt ttctcctcaa ggccaagtac gcccaggacg agcacctcat tacattcttc  
2880

gtgcctgtct ttgaaccgct gccccctcag tacttcatcc gagtgggtgc tgaccgctgg  
2940  
ctctcttggtg agaccagct gcctgtctcc ttccggcacc tgatcttgcc ggagaagtac  
3000  
ccccctccaa ccgaactttt ggacctgcag cccttgcccc tgtctgtctt gaaaaacagt  
3060  
gcctttgaga gtctttacca agataaattt cttttcttca atcccatcca gaccaggtg  
3120  
tttaacctg tatacaacag tgacgacaac gtgtttgtgg gggccccac gggcagcggg  
3180  
aagactattt gtgcagagt tgccatcctg cgaatgtgc tgcagagctc ggagggcgcg  
3240  
tgtgtgtaca tccccccat ggaggccctg gcagagcagg tatacatgga ctggtacgag  
3300  
aagttccagg acaggctcaa caagaagggt gtactcctga caggcgagac cagcacagac  
3360  
ctgaagctgc tgggcaaagg gaacattatc atcagcacc ctgagaagtg ggacatactt  
3420  
tcccgccgat ggaagcagcg caagaacgtg cagaacatca acctcttctg ggtggatgag  
3480  
gtccacctta tggggggcga gaatgggcct gtcttagaag tgatctgtc ccgaatgcgc  
3540  
tacatctct cccagattga ggggccatt cgcattgtgg cactcagctc ttcgtctcc  
3600  
aatgccaaagg atgtggccca ctggctgggc tgcagtgcc cctccacctt caacttccat  
3660  
cccaatgtgc gtcccgctcc cttggagctg cacatccagg gcttcaacat cagccataca  
3720  
caaaccgcc tgctctccat ggccaagcct gtgtaccat ctatcaccaa gcaactcgcc  
3780  
aagaagcctg tcattgtctt tgtgccgtct cgcaagcaga cccgcctcac tgccattgac  
3840  
atcctcacca cctgtgcagc agacatccaa cggcagaggt tcttgactg caccgagaag  
3900  
gatctgattc cgtacctgga gaagetaagt gacagcacgc tcaaggaaac gctgctaaat  
3960  
ggggtgggct acctgcatga ggggctcagc cccatggagc gacgcctggt ggagcagctc  
4020  
ttcagctcag gggctatcca ggtgggtgtg gcttctcgga gtctctgtg gggcatgaac  
4080  
gtggctgccc acctggtaat catcatggat acccagtact acaatggcaa gatccacgcc  
4140  
tatgtggatt accccatcta tgacgtgctt cagatgggtg gccacgcaa ccgcccttg  
4200  
caggacgatg aggggcgctg tgtcatcatg tgtcagggt ccaagaagga tttcttcaag  
4260  
aagttcttat atgagccatt gccagtagaa tctcacctgg accactgtat gcatgaccac  
4320  
ttcaatgtg agatcgtcac caagaccatt gagaacaagc aggatgctgt ggactacctc  
4380  
acctggacct ttctgtaccg ccgcatgaca cagaacccca attactaaa cctgcagggc  
4440  
atctcccatc gtcactgtgc ggaccacttg tcagagctgg tggagcagac cctgagtgac  
4500

ctggagcagt ccaagtgcac cagcatcgag gacgagatgg acgtggcgcc tctgaaccta  
4560  
ggcatgatcg ccgectacta ttacatcaac tacaccacca ttgagctctt cagcatgtcc  
4620  
ctcaatgccca agaccaaggt gcgagggtt atcgagatca tctccaatgc agcagagtat  
4680  
gagaacattc ccatccggca ccatgaagac aatctcctga ggcagttggc tcagaaggtc  
4740  
ccccacaagc tgaataaccc taagttcaat gatccgcacg tcaagaccaa cctgctcctg  
4800  
caggctcact tgtctcgcat gcagctgagt gctgagttgc agtcagatac ggaggaaatc  
4860  
cttagtaagg caatccggct catccaggcc tgcgtggatg tcctttccag caatgggtgg  
4920  
ctcagccctg ctctggcagc tatggaactg gccagatgg tcacccaagc catgtggtcc  
4980  
aaggactcat acctgaagca gctgccacac ttacacctg agcatatcaa acgttgacaa  
5040  
gacaaggagg tggagagtgt ttctgacatc atggagatgg aggatgaaga acggaacgag  
5100  
ttgcttcage tgactgacag ccagattgca gatgtggctc gcttttgtaa ccgctacctt  
5160  
aatatcgaac tatcttatga ggtggttagat aaggacagca tccgcagtgg cgggccagtt  
5220  
gtgggtgctgg tgcagctgga gcgagaggag gaagtcacag gccctgtcat tgcgcctctc  
5280  
ttcccgaga aacgtgaaga gggctggtgg gtggtgattg gagatgcaa gtccaatagc  
5340  
ctcatctcca tcaagaggct gacctgacg cagaaggcca aggtgaagtt ggactttgtg  
5400  
gccccagcca ctggtgcccc caactacact ctgtacttca tgagtgcgc ttacatggga  
5460  
tgtgaccagg agtacaaatt cagcgtggat gtgaaagaag ctgagacaga cagtgattca  
5520  
gattgagtc tgaggcattt acttttgggt aaaggagagt tgagcctgaa ttaggaatgt  
5580  
gtacattgta ggaatcctgg ttgtggggac caggtctgtg ggcctcaggt ctggccagcc  
5640  
agggctggtg ctgtccccgc ctacctccac ttctttccc ttgctcactc tggatccagt  
5700  
gacagcaggt gtcattgggtc aagcataaat catatatagc attttcaggc atgttcctgg  
5760  
tagttctttt gagtctgaca ttctaataaa ataatttga gaaaccattt gtctttgtag  
5820  
tgattccaaa ttaaaagtgt tctttctcca acctgagggc acggccaaaa agatctgggt  
5880  
attttttagc caggaacgtg ctgttaatg agtatgtctg gaggacagac ctgctcatta  
5940  
ggtgtgctgt ccctgtagc ctctgagtc agccagagg aggttacatg cgactgtggc  
6000  
ctggcctcag tggtaaccac acatcagcac taccacaaga accaactctg agcctcggaa  
6060  
gctagatcac aggttagggg tttctctaga tgggggtctt gaaatttgca gtgtctgctc  
6120

ctgggaggca gcaccagaaa gggcactgaa atgtactagc tggatgtgac ccagtcttaa  
 6180  
 taaacagggtt ttctaattcc  
 6199

<210> 2234  
 <211> 1701  
 <212> PRT  
 <213> Homo sapiens

<400> 2234  
 Arg Arg Gln Arg Lys Gly Tyr Glu Glu Val His Val Pro Ala Leu Lys  
 1 5 10 15  
 Pro Lys Pro Phe Gly Ser Glu Glu Gln Leu Leu Pro Val Glu Lys Leu  
 20 25 30  
 Pro Lys Tyr Ala Gln Ala Gly Phe Glu Gly Phe Lys Thr Leu Asn Arg  
 35 40 45  
 Ile Gln Ser Lys Leu Tyr Arg Ala Ala Leu Glu Thr Asp Glu Asn Leu  
 50 55 60  
 Leu Leu Cys Ala Pro Thr Gly Ala Gly Lys Thr Asn Val Ala Leu Met  
 65 70 75 80  
 Cys Met Leu Arg Glu Ile Gly Lys His Ile Asn Met Asp Gly Thr Ile  
 85 90 95  
 Asn Val Asp Asp Phe Lys Ile Ile Tyr Ile Ala Pro Met Arg Ser Leu  
 100 105 110  
 Val Gln Glu Met Val Gly Ser Phe Gly Lys Arg Leu Ala Thr Tyr Gly  
 115 120 125  
 Ile Thr Val Ala Glu Leu Thr Gly Asp His Gln Leu Cys Lys Glu Glu  
 130 135 140  
 Ile Ser Ala Thr Gln Ile Ile Val Cys Thr Pro Glu Lys Trp Asp Ile  
 145 150 155 160  
 Ile Thr Arg Lys Gly Gly Glu Arg Thr Tyr Thr Gln Leu Val Arg Leu  
 165 170 175  
 Ile Val Leu Asp Glu Ile His Leu Leu His Asp Asp Arg Gly Pro Val  
 180 185 190  
 Leu Glu Ala Leu Val Ala Arg Ala Ile Arg Asn Ile Glu Met Thr Gln  
 195 200 205  
 Glu Asp Val Arg Leu Ile Gly Leu Ser Ala Thr Leu Pro Asn Tyr Glu  
 210 215 220  
 Asp Val Ala Thr Phe Leu Arg Val Asp Pro Ala Lys Gly Leu Phe Tyr  
 225 230 235 240  
 Phe Asp Asn Ser Phe Arg Pro Val Pro Leu Glu Gln Thr Tyr Val Gly  
 245 250 255  
 Ile Thr Glu Lys Lys Ala Ile Lys Arg Phe Gln Ile Met Asn Glu Ile  
 260 265 270  
 Val Tyr Glu Lys Ile Met Glu His Ala Gly Lys Asn Gln Val Leu Val  
 275 280 285  
 Phe Val His Ser Arg Lys Glu Thr Gly Lys Thr Ala Arg Ala Ile Arg  
 290 295 300  
 Asp Met Cys Leu Glu Lys Asp Thr Leu Gly Leu Phe Leu Arg Glu Gly  
 305 310 315 320  
 Ser Ala Ser Thr Glu Val Leu Arg Thr Glu Ala Glu Gln Cys Lys Asn  
 325 330 335  
 Leu Glu Leu Lys Asp Leu Leu Pro Tyr Gly Phe Ala Ile His His Ala

				340									345								350			
Gly	Met	Thr	Arg	Val	Asp	Arg	Thr	Leu	Val	Glu	Asp	Leu	Phe	Ala	Asp									
Lys	His	Ile	Gln	Val	Leu	Val	Ser	Thr	Ala	Thr	Leu	Ala	Trp	Gly	Val									
Asn	Leu	Pro	Ala	His	Thr	Val	Ile	Ile	Lys	Gly	Thr	Gln	Val	Tyr	Ser									
385																								
Pro	Glu	Lys	Gly	Arg	Trp	Thr	Glu	Leu	Gly	Ala	Leu	Asp	Ile	Leu	Gln									
Met	Leu	Gly	Arg	Ala	Gly	Arg	Pro	Gln	Tyr	Asp	Thr	Lys	Gly	Glu	Gly									
Ile	Leu	Ile	Thr	Ser	His	Gly	Glu	Leu	Gln	Tyr	Tyr	Leu	Ser	Leu	Leu									
Asn	Gln	Gln	Leu	Pro	Ile	Glu	Ser	Gln	Met	Val	Ser	Lys	Leu	Pro	Asp									
Met	Leu	Asn	Ala	Glu	Ile	Val	Leu	Gly	Asn	Val	Gln	Asn	Ala	Lys	Asp									
465																								
Ala	Val	Asn	Trp	Leu	Gly	Tyr	Ala	Tyr	Leu	Tyr	Ile	Arg	Met	Leu	Arg									
Ser	Pro	Thr	Leu	Tyr	Gly	Ile	Ser	His	Asp	Asp	Leu	Lys	Gly	Asp	Pro									
Leu	Leu	Asp	Gln	Arg	Arg	Leu	Asp	Leu	Val	His	Thr	Ala	Ala	Leu	Met									
Leu	Asp	Lys	Asn	Asn	Leu	Val	Lys	Tyr	Asp	Lys	Lys	Thr	Gly	Asn	Phe									
Gln	Val	Thr	Glu	Leu	Gly	Arg	Ile	Ala	Ser	His	Tyr	Tyr	Ile											

770	775	780
Ala Phe Trp Ile Leu Val Glu Asp Val Asp Ser Glu Val Ile Leu His		
785	790	795
His Glu Tyr Phe Leu Leu Lys Ala Lys Tyr Ala Gln Asp Glu His Leu		
	805	810
Ile Thr Phe Phe Val Pro Val Phe Glu Pro Leu Pro Pro Gln Tyr Phe		
	820	825
Ile Arg Val Val Ser Asp Arg Trp Leu Ser Cys Glu Thr Gln Leu Pro		
	835	840
Val Ser Phe Arg His Leu Ile Leu Pro Glu Lys Tyr Pro Pro Pro Thr		
	850	855
Glu Leu Leu Asp Leu Gln Pro Leu Pro Val Ser Ala Leu Arg Asn Ser		
	865	870
Ala Phe Glu Ser Leu Tyr Gln Asp Lys Phe Pro Phe Phe Asn Pro Ile		
	885	890
Gln Thr Gln Val Phe Asn Thr Val Tyr Asn Ser Asp Asp Asn Val Phe		
	900	905
Val Gly Ala Pro Thr Gly Ser Gly Lys Thr Ile Cys Ala Glu Phe Ala		
	915	920
Ile Leu Arg Met Leu Leu Gln Ser Ser Glu Gly Arg Cys Val Tyr Ile		
	930	935
Thr Pro Met Glu Ala Leu Ala Glu Gln Val Tyr Met Asp Trp Tyr Glu		
	945	950
Lys Phe Gln Asp Arg Leu Asn Lys Lys Val Val Leu Leu Thr Gly Glu		
	965	970
Thr Ser Thr Asp Leu Lys Leu Leu Gly Lys Gly Asn Ile Ile Ile Ser		
	980	985
Thr Pro Glu Lys Trp Asp Ile Leu Ser Arg Arg Trp Lys Gln Arg Lys		
	995	1000
Asn Val Gln Asn Ile Asn Leu Phe Val Val Asp Glu Val His Leu Ile		
	1010	1015
Gly Gly Glu Asn Gly Pro Val Leu Glu Val Ile Cys Ser Arg Met Arg		
	1025	1030
Tyr Ile Ser Ser Gln Ile Glu Arg Pro Ile Arg Ile Val Ala Leu Ser		
	1045	1050
Ser Ser Leu Ser Asn Ala Lys Asp Val Ala His Trp Leu Gly Cys Ser		
	1060	1065
Ala Thr Ser Thr Phe Asn Phe His Pro Asn Val Arg Pro Val Pro Leu		
	1075	1080
Glu Leu His Ile Gln Gly Phe Asn Ile Ser His Thr Gln Thr Arg Leu		
	1090	1095
Leu Ser Met Ala Lys Pro Val Tyr His Ala Ile Thr Lys His Ser Pro		
	1105	1110
Lys Lys Pro Val Ile Val Phe Val Pro Ser Arg Lys Gln Thr Arg Leu		
	1125	1130
Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln Arg Gln		
	1140	1145
Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys		
	1155	1160
Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr		
	1170	1175
Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu		
	1185	1190
Phe Ser Ser Gly Ala Ile Gln Val Val Val Ala Ser Arg Ser Leu Cys		

	1205		1210		1215
Trp Gly Met Asn Val Ala Ala His Leu Val Ile Ile Met Asp Thr Gln					
	1220		1225		1230
Tyr Tyr Asn Gly Lys Ile His Ala Tyr Val Asp Tyr Pro Ile Tyr Asp					
	1235		1240		1245
Val Leu Gln Met Val Gly His Ala Asn Arg Pro Leu Gln Asp Asp Glu					
	1250		1255		1260
Gly Arg Cys Val Ile Met Cys Gln Gly Ser Lys Lys Asp Phe Phe Lys					
1265		1270		1275	1280
Lys Phe Leu Tyr Glu Pro Leu Pro Val Glu Ser His Leu Asp His Cys					
	1285		1290		1295
Met His Asp His Phe Asn Ala Glu Ile Val Thr Lys Thr Ile Glu Asn					
	1300		1305		1310
Lys Gln Asp Ala Val Asp Tyr Leu Thr Trp Thr Phe Leu Tyr Arg Arg					
	1315		1320		1325
Met Thr Gln Asn Pro Asn Tyr Tyr Asn Leu Gln Gly Ile Ser His Arg					
1330		1335		1340	
His Leu Ser Asp His Leu Ser Glu Leu Val Glu Gln Thr Leu Ser Asp					
1345		1350		1355	1360
Leu Glu Gln Ser Lys Cys Ile Ser Ile Glu Asp Glu Met Asp Val Ala					
	1365		1370		1375
Pro Leu Asn Leu Gly Met Ile Ala Ala Tyr Tyr Tyr Ile Asn Tyr Thr					
	1380		1385		1390
Thr Ile Glu Leu Phe Ser Met Ser Leu Asn Ala Lys Thr Lys Val Arg					
	1395		1400		1405
Gly Leu Ile Glu Ile Ile Ser Asn Ala Ala Glu Tyr Glu Asn Ile Pro					
	1410		1415		1420
Ile Arg His His Glu Asp Asn Leu Leu Arg Gln Leu Ala Gln Lys Val					
1425		1430		1435	1440
Pro His Lys Leu Asn Asn Pro Lys Phe Asn Asp Pro His Val Lys Thr					
	1445		1450		1455
Asn Leu Leu Leu Gln Ala His Leu Ser Arg Met Gln Leu Ser Ala Glu					
	1460		1465		1470
Leu Gln Ser Asp Thr Glu Glu Ile Leu Ser Lys Ala Ile Arg Leu Ile					
	1475		1480		1485
Gln Ala Cys Val Asp Val Leu Ser Ser Asn Gly Trp Leu Ser Pro Ala					
	1490		1495		1500
Leu Ala Ala Met Glu Leu Ala Gln Met Val Thr Gln Ala Met Trp Ser					
1505		1510		1515	1520
Lys Asp Ser Tyr Leu Lys Gln Leu Pro His Phe Thr Ser Glu His Ile					
	1525		1530		1535
Lys Arg Cys Thr Asp Lys Gly Val Glu Ser Val Phe Asp Ile Met Glu					
	1540		1545		1550
Met Glu Asp Glu Glu Arg Asn Ala Leu Leu Gln Leu Thr Asp Ser Gln					
	1555		1560		1565
Ile Ala Asp Val Ala Arg Phe Cys Asn Arg Tyr Pro Asn Ile Glu Leu					
	1570		1575		1580
Ser Tyr Glu Val Val Asp Lys Asp Ser Ile Arg Ser Gly Gly Pro Val					
1585		1590		1595	1600
Val Val Leu Val Gln Leu Glu Arg Glu Glu Glu Val Thr Gly Pro Val					
	1605		1610		1615
Ile Ala Pro Leu Phe Pro Gln Lys Arg Glu Glu Gly Trp Trp Val Val					
	1620		1625		1630
Ile Gly Asp Ala Lys Ser Asn Ser Leu Ile Ser Ile Lys Arg Leu Thr					



```

      1635      1640      1645
Leu Gln Gln Lys Ala Lys Val Lys Leu Asp Phe Val Ala Pro Ala Thr
      1650      1655      1660
Gly Ala His Asn Tyr Thr Leu Tyr Phe Met Ser Asp Ala Tyr Met Gly
      1665      1670      1675      1680
Cys Asp Gln Glu Tyr Lys Phe Ser Val Asp Val Lys Glu Ala Glu Thr
      1685      1690      1695
Asp Ser Asp Ser Asp
      1700

```

<210> 2235  
 <211> 586  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2235
tctagaatga gtatgaggac actctcacca gagtgagggtg aagggtgtata cagctggcac
60
tcagtgtctg cacattctcc actggcagaa tgactcccgga cgtggctcgg gctccccgga
120
agacaccct cgaagcagtg gtgcctctag catcttcgac ctgaggaacc tggcagctga
180
ctcattgttg cctctctctgc tagagcgggc ggccccagaa gatgtggacc ggcgcaatga
240
agcccttcga cggcagcacc ggccccgggc cctgtctccc ctctaccggg cacctgacga
300
ggatgaagcc ggggaacgct gtagccgct agagccaccc ccgcgagcac tttggacaaa
360
ggatcttggc caagtgtctg tcgtcaagt tcgagattga aattgagccc atctttggga
420
tcttggctct gtatgatgtg cggaagaaaa agaagatctc ggaaaacttc tacttcgacc
480
tgaactcgga ctccatgaag gggctgcttc gggctcatgg caccaccct gccatctcca
540
ccctggcccg ctctgccatc ttctctgtga cctaccctc acgcgt
586

```

<210> 2236  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2236
Met Ser Pro Lys Gln Pro Leu His Gly Val Arg Val Gln Val Glu Val
1      5      10      15
Glu Val Phe Arg Asp Leu Leu Phe Leu Pro His Ile Ile Gln Ser Gln
20      25      30
Asp Pro Lys Asp Gly Leu Asn Phe Asn Leu Glu Leu Glu Arg Gln Thr
35      40      45
Leu Asp Gln Asp Pro Leu Ser Lys Val Leu Ala Gly Val Ala Leu Gly
50      55      60
Gly Tyr Ser Val Pro Arg Leu His Pro Arg Gln Val Pro Gly Arg Gly
65      70      75      80
Glu Ala Gly Pro Gly Ala Gly Ala Ala Val Glu Gly Leu His Cys Ala

```

```
<210> 2237
<211> 421
<212> DNA
<213> Homo sapiens
```

```
<210> 2238
<211> 124
<212> PRT
<213> Homo sapiens
```

<210> 2239  
<211> 623

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2239

gctagcagga ctcagaaatc tgctgttgag cacaaagcca aaaaatctct gtcccatcct  
60  
agccattcca ggcctgggcc catggtcacc ccacacaata aggctaagag tccaggtgtc  
120  
aggcagccag gcagcagctc tagctcagcc cctgggcagc ccagcacagg ggttgctcga  
180  
cccacagtta gttctggccc tgtgcctagg cgccagaatg gcagctccag ctccaggacct  
240  
gagcgatcaa tcagtgggtc caagaagcca accaatgact caaatccctc taggcggaca  
300  
gtcagtggta catgtggccc tggacaacct gcaagcagct caggtggccc tgggcgaccc  
360  
atcagtgggt cagttagttc tgcaagacct ttgggcagct ctctgggccc tggccggcct  
420  
gtgagcagtc cacatgaact tcgacgacca gtgagtggct tgggcccccc gggcggtct  
480  
gtcagtggcc ctgggagatc cataagtggc ccaattccag ctggacggac tgtcagtaat  
540  
tcagtcaccag gaagaccagt gacagcttg ggacctgggc aaacagttag tagctcaggt  
600  
cccactataa agcctaagtg cac  
623

&lt;210&gt; 2240

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2240

Ala	Ser	Arg	Thr	Gln	Lys	Ser	Ala	Val	Glu	His	Lys	Ala	Lys	Lys	Ser
1				5					10					15	
Leu	Ser	His	Pro	Ser	His	Ser	Arg	Pro	Gly	Pro	Met	Val	Thr	Pro	His
			20					25					30		
Asn	Lys	Ala	Lys	Ser	Pro	Gly	Val	Arg	Gln	Pro	Gly	Ser	Ser	Ser	Ser
		35				40					45				
Ser	Ala	Pro	Gly	Gln	Pro	Ser	Thr	Gly	Val	Ala	Arg	Pro	Thr	Val	Ser
	50					55				60					
Ser	Gly	Pro	Val	Pro	Arg	Arg	Gln	Asn	Gly	Ser	Ser	Ser	Ser	Gly	Pro
65					70				75					80	
Glu	Arg	Ser	Ile	Ser	Gly	Ser	Lys	Lys	Pro	Thr	Asn	Asp	Ser	Asn	Pro
			85					90					95		
Ser	Arg	Arg	Thr	Val	Ser	Gly	Thr	Cys	Gly	Pro	Gly	Gln	Pro	Ala	Ser
			100					105					110		
Ser	Ser	Gly	Gly	Pro	Gly	Arg	Pro	Ile	Ser	Gly	Ser	Val	Ser	Ser	Ala
		115				120						125			
Arg	Pro	Leu	Gly	Ser	Ser	Arg	Gly	Pro	Gly	Arg	Pro	Val	Ser	Ser	Pro
	130					135					140				
His	Glu	Leu	Arg	Arg	Pro	Val	Ser	Gly	Leu	Gly	Pro	Pro	Gly	Arg	Ser
145					150				155					160	
Val	Ser	Gly	Pro	Gly	Arg	Ser	Ile	Ser	Gly	Pro	Ile	Pro	Ala	Gly	Arg

				165					170					175		
Thr	Val	Ser	Asn	Ser	Val	Pro	Gly	Arg	Pro	Val	Ser	Ser	Leu	Gly	Pro	
			180					185					190			
Gly	Gln	Thr	Val	Ser	Ser	Ser	Gly	Pro	Thr	Ile	Lys	Pro	Lys	Cys		
		195					200					205				

```
<210> 2241
<211> 656
<212> DNA
<213> Homo sapiens
```

```

<400> 2241
nnacgcgtga aggggcagcag caacaccacg gagtgtgttc cgtgccccac ctccgagcac
60
gtggcccgaga tcgtgggcag gcaaggctgc aagattaagg ccttgagggc caagaccaac
120
acctacatta gaaccccggg aaggggcgag gaaccagtgt tcatggtgac agggcgacgg
180
gaggacgtgg ccacagcccg gcgggaaatc atctcagcag cggagcactt ctccatgac
240
cgtgcctccc gcaacaagtc aggcgccgc tttggtgtgg ctctgctct gcccgccag
300
gtgaccatcc gtgtgcgggt gccctaccgc gtggtggggc tgggtgtggg ccccaaagg
360
gcaaccatca agcgcattca gcagcaaacc aacacataca ttatcacacc aagccgtgac
420
cgcgaccccc tgttcgagat cacgggtgcc ccaggcaacg tggagcgtgc gcgcgaggag
480
atcgagacgc acatcgcggt gcgcactggc aagatcctcg agtacaacaa tgaaaacgac
540
ttcctggcgg ggagccccga cgcagcaatc gatagccgct actccgacgc ctggcgggtg
600
caccagcccc gctgcaagcc cctctccacc ttccggcaga acagcctggg ctgcag
656

```

```
<210> 2242
<211> 218
<212> PRT
<213> Homo sapiens
```

<400> 2242															
Xaa	Arg	Val	Lys	Gly	Ser	Ser	Asn	Thr	Thr	Glu	Cys	Val	Pro	Val	Pro
1				5					10					15	
Thr	Ser	Glu	His	Val	Ala	Glu	Ile	Val	Gly	Arg	Gln	Gly	Cys	Lys	Ile
			20					25					30		
Lys	Ala	Leu	Arg	Ala	Lys	Thr	Asn	Thr	Tyr	Ile	Arg	Thr	Pro	Gly	Arg
		35					40					45			
Gly	Glu	Glu	Pro	Val	Phe	Met	Val	Thr	Gly	Arg	Arg	Glu	Asp	Val	Ala
		50				55					60				
Thr	Ala	Arg	Arg	Glu	Ile	Ile	Ser	Ala	Ala	Glu	His	Phe	Ser	Met	Ile
65					70					75					80
Arg	Ala	Ser	Arg	Asn	Lys	Ser	Gly	Ala	Ala	Phe	Gly	Val	Ala	Pro	Ala
				85					90					95	
Leu	Pro	Gly	Gln	Val	Thr	Ile	Arg	Val	Arg	Val	Pro	Tyr	Arg	Val	Val

```

      100      105      110
Gly Leu Val Val Gly Pro Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln
      115      120      125
Gln Thr Asn Thr Tyr Ile Ile Thr Pro Ser Arg Asp Arg Asp Pro Val
      130      135      140
Phe Glu Ile Thr Gly Ala Pro Gly Asn Val Glu Arg Ala Arg Glu Glu
      145      150      155      160
Ile Glu Thr His Ile Ala Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn
      165      170      175
Asn Glu Asn Asp Phe Leu Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser
      180      185      190
Arg Tyr Ser Asp Ala Trp Arg Val His Gln Pro Gly Cys Lys Pro Leu
      195      200      205
Ser Thr Phe Arg Gln Asn Ser Leu Gly Cys
      210      215

```

<210> 2243  
 <211> 384  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2243
gaattcagca tttaaatgtc actcgttggc atgcaatttg ctgtcatgaa aacgactgtg
60
gattcatttc ctggtaagaa tcttctgact tattgagctg catgtcagaa gcaaaaagca
120
aaaaaaccaa atatgtacat aaaacagtgt tatcattcct taaaagagaa ggaaaataaa
180
tccctaaata atgtggactg gaacacagaa atccaaggct ggccgcacgg gtcctggctg
240
ggatggcatc cggggagctg ctgctgggga cgtgcttgcc ggcacaggtc aggggagccg
300
ggttctgcct cctccttgcc cactctcttt gcgcctccc tgtgctcgcc tgtcttgttt
360
tacctcccat cctgggccct tgga
384

```

<210> 2244  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2244
Met Gly Gly Lys Thr Arg Gln Ala Ser Thr Gly Arg Ala Gln Arg Glu
1      5      10      15
Trp Ala Arg Arg Gln Asn Pro Ala Pro Leu Thr Cys Ala Gly Lys
20      25      30
His Val Pro Ser Ser Ser Ser Pro Asp Ala Ile Pro Ala Arg Thr Arg
35      40      45
Ala Ala Ser Leu Gly Phe Leu Cys Ser Ser Pro His Tyr Leu Gly Ile
50      55      60
Tyr Phe Pro Ser Leu Leu Arg Asn Asp Asn Thr Val Leu Cys Thr Tyr
65      70      75      80
Leu Val Phe Leu Leu Phe Ala Ser Asp Met Gln Leu Asn Lys Ser Glu

```

85 90 95  
 Asp Ser Tyr Gln Glu Met Asn Pro Gln Ser Phe Ser  
 100 105  
  
 <210> 2245  
 <211> 632  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 2245  
 acgcgtgcga ttaccgtcaa ggctgggtgtg gtgagcgctg atctgcacga gcggacgtct  
 60  
 tcgagagaag aggtcggacg cgagaggctc aactatgggtc acaccttggc ccacgtatt  
 120  
 gaggcccaca agcatttcac gtggcgatcat ggcgaggctg acgcgggtggg catggtgttt  
 180  
 gcggccgaac tgtcgacccg gtacctggga ctgtccgatg aggtcgttgc gcgcacccgc  
 240  
 actatcctgt ctgagatcgg attgcctggt acctgtgacg agattaagtg ggcagatctg  
 300  
 cgcaagacga tgaactgga caagaaaacc agggtagacc cgcagaccgg gcgtcaagtg  
 360  
 ttgcggtttg tcggtattca caaacccggt caggtcgcca tgatcgctga ccctgacgag  
 420  
 gccgctttag ccgagtgcga cgaccggtgt tccgcacggt aaaaacgttc ggaaatgaac  
 480  
 atgtggctgc gggtcagtcg gcattcaggc ctccgtgacg ccgtcgaccc caagtgatgt  
 540  
 gacgattcgg gaaatatctt gttgggcact cttgagcctc gcctgattcc ccatacccca  
 600  
 cttaagttca gtatcgacgg catgaatccg ga  
 632  
  
 <210> 2246  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 2246  
 Thr Arg Ala Ile Thr Val Lys Ala Gly Val Val Ser Ala Asp Leu His  
 1 5 10 15  
 Glu Arg Thr Ser Ser Arg Glu Glu Val Gly Arg Glu Arg Leu Asn Tyr  
 20 25 30  
 Gly His Thr Leu Ala His Ala Ile Glu Ala His Lys His Phe Thr Trp  
 35 40 45  
 Arg His Gly Glu Ala Asp Ala Val Gly Met Val Phe Ala Ala Glu Leu  
 50 55 60  
 Ser His Arg Tyr Leu Gly Leu Ser Asp Glu Val Val Ala Arg Thr Arg  
 65 70 75 80  
 Thr Ile Leu Ser Glu Ile Gly Leu Pro Val Thr Cys Asp Glu Ile Lys  
 85 90 95  
 Trp Ala Asp Leu Arg Lys Thr Met Asn Val Asp Lys Lys Thr Arg Val  
 100 105 110  
 Asp Pro Gln Thr Gly Arg Gln Val Leu Arg Phe Val Gly Ile His Lys

```

      115              120              125
Pro Gly Gln Val Ala Met Ile Val Asp Pro Asp Glu Ala Ala Leu Ala
      130              135              140
Glu Cys Tyr Asp Arg Cys Ser Ala Arg
145              150

```

<210> 2247  
 <211> 324  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2247
gggcgttcgc ctccagggtt ctccccgaca ctggatgcc aacctgcccag gggcagaagg
60
gaggttgggc gtggggagtg ccgggtacag tcagagttgc caggacagtt tggagcagtg
120
cctcttaatc ttggccgcac agcacctggg agctttaaat agacccccac gccctgggcg
180
ccccaccgc tgaccacccc gatctcagct ctgcctttcc cgctctctg ctgggttgca
240
taagccagcg attcccaacc ccggctgtac ctggaagcta cccaggagc ttctggagaa
300
tgtgccgtgt gagccatccc cctg
324

```

<210> 2248  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2248
Met Ala His Thr Ala His Ser Pro Glu Ala Pro Gly Val Ala Ser Arg
 1      5      10      15
Tyr Ser Arg Gly Trp Glu Ser Leu Ala Tyr Ala Thr Gln Gln Arg Gly
      20      25      30
Gly Lys Gly Arg Ala Glu Ile Gly Trp Val Ser Gly Gly Gly Ala Gln
      35      40      45
Gly Val Gly Val Tyr Leu Lys Leu Pro Gly Ala Val Arg Pro Arg Leu
      50      55      60
Arg Gly Thr Ala Pro Asn Cys Pro Gly Asn Ser Asp Cys Thr Arg His
      65      70      75      80
Ser Pro Arg Pro Thr Ser Leu Leu Pro Leu Gly Arg Leu Ala Ser Ser
      85      90      95
Val Gly Glu Asn Pro Gly Gly Glu Arg
      100      105

```

<210> 2249  
 <211> 394  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2249
gaaaaccgga taacagggtg tatacaagcc tctgagttct gggagcaaca accagctcaa
60

```

cccgcaaggg aaagtgagaa agcaattaag ttgggaaccg cgggggttttc ccattccac  
 120  
 ggtggaaacc gcgccagtg aattgaaatc cgcttcctta aggcgaaatg ggcccttaaa  
 180  
 aggcaaggtc aaccgcccgc cagtgtgatg gaatttgcaa gaattcggtt tagcaccctc  
 240  
 ccggcttttc tcccgaccgc gtgcaggggtg ggctgcgctg ggctgggag gaactgggag  
 300  
 ctgggggctc atgtcctgta taaaggggct gcaggggcgc tgtctcccc cagaagactg  
 360  
 gccacatggg gacaggcctc ctgggggcag atct  
 394

<210> 2250  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 2250  
 Met Ser Pro Gln Leu Pro Val Pro Pro Arg Pro Ser Ala Ala His Pro  
 1 5 10 15  
 Ala Arg Gly Arg Glu Lys Ser Arg Glu Gly Ala Lys Pro Asn Ser Cys  
 20 25 30  
 Lys Phe His His Thr Gly Gly Arg Leu Thr Leu Pro Phe Lys Gly Pro  
 35 40 45  
 Phe Arg Leu Lys Glu Ala Asp Phe Asn Ser Leu Ala Ala Val Ser Thr  
 50 55 60  
 Val Gly Met Gly Lys Pro Arg Gly Ser Gln Leu Asn Cys Phe Leu Thr  
 65 70 75 80  
 Phe Pro Cys Gly Leu Ser Trp Leu Leu Leu Pro Glu Leu Arg Gly Leu  
 85 90 95  
 Tyr Thr Pro Cys Tyr Pro Val Phe  
 100

<210> 2251  
 <211> 654  
 <212> DNA  
 <213> Homo sapiens

<400> 2251  
 acgcgtactt attcgccacc atgattatga ccagtgtttc cagtcggttc agttgttgca  
 60  
 gtggaatagt cagggttaaat ttaatgtgac cgtttatcgc aatctgccga ccactcgca  
 120  
 ttcaatcatg acttcgtgat aaaagattga gtgtgagggtt ataacgccga agcggtaaaa  
 180  
 attttaattt ttgccgctga ggggttgacc aagcgaagcg cggtagggtt tctgcttagg  
 240  
 agtttaatca tgtttcagac ttttatttct cgccataatt caaacttttt ttctgataag  
 300  
 ctggttctca cttctgttac tccagcttct tcggcacctg ttttacagac acctaaagct  
 360  
 acatcgtaaa cgttatatat tgatagtttg acgggttaatg ctggtaatgg tggttttctt  
 420



cattgcattc agatggatac atctgtcaac gccgctaac aggttggttc tgttggtgct  
 480  
 gatattgctt ttgatgccga ccctaaattt ttgcctggtt tgggtcgctt tgagtcttct  
 540  
 tcgggtccga ctaccctccc gactgcctat gatgtttatc ctttggatgg tcgccatgat  
 600  
 ggtggttatt ataccgtcaa ggactgtgtg actattgacg tccttcctcg tacg  
 654

<210> 2252

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2252

Met	Phe	Gln	Thr	Phe	Ile	Ser	Arg	His	Asn	Ser	Asn	Phe	Phe	Ser	Asp
1				5					10					15	
Lys	Leu	Val	Leu	Thr	Ser	Val	Thr	Pro	Ala	Ser	Ser	Ala	Pro	Val	Leu
			20					25					30		
Gln	Thr	Pro	Lys	Ala	Thr	Ser	Ser	Thr	Leu	Tyr	Phe	Asp	Ser	Leu	Thr
		35					40					45			
Val	Asn	Ala	Gly	Asn	Gly	Gly	Phe	Leu	His	Cys	Ile	Gln	Met	Asp	Thr
	50				55						60				
Ser	Val	Asn	Ala	Ala	Asn	Gln	Val	Val	Ser	Val	Gly	Ala	Asp	Ile	Ala
65					70					75				80	
Phe	Asp	Ala	Asp	Pro	Lys	Phe	Phe	Ala	Cys	Leu	Val	Arg	Phe	Glu	Ser
			85						90					95	
Ser	Ser	Val	Pro	Thr	Thr	Leu	Pro	Thr	Ala	Tyr	Asp	Val	Tyr	Pro	Leu
			100					105					110		
Asp	Gly	Arg	His	Asp	Gly	Gly	Tyr	Tyr	Thr	Val	Lys	Asp	Cys	Val	Thr
	115						120					125			
Ile	Asp	Val	Leu	Pro	Arg	Thr									
	130					135									

<210> 2253

<211> 327

<212> DNA

<213> Homo sapiens

<400> 2253

ggatcctgct gggcctcttt tacgtgatgt tgaccagcc gctggtgcgc attattcgcg  
 60  
 cactgagcac cagcaagcag gcccgctgg attgccacc gggtcacgaa aacgatgaaa  
 120  
 tcggcgtatt ggtcaacgtc gcccaaccagc aattcgacaa tatggaaacc gaaatcgagc  
 180  
 agcgccgcca cgccgaggac cgctcaccg aatactggg ccaactggaa gatatcgctt  
 240  
 ccgcacgcac cctggagctc aaggccagca accaacgctt gagccaatcc aacgatgagc  
 300  
 tggaagcggc aaagttgacc gccttgg  
 327

<210> 2254

<211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2254  
 Met Leu Thr Gln Pro Leu Val Arg Ile Ile Arg Ala Leu Ser Thr Ser  
   1                  5                  10                  15  
 Lys Gln Ala Arg Leu Asp Cys Pro Pro Gly His Glu Asn Asp Glu Ile  
           20                  25                  30  
 Gly Val Leu Val Asn Val Ala Asn Gln Gln Phe Asp Asn Met Glu Thr  
           35                  40                  45  
 Glu Ile Glu Gln Arg Arg His Ala Glu Asp Arg Leu Thr Glu Tyr Leu  
           50                  55                  60  
 Gly Gln Leu Glu Asp Ile Val Ser Ala Arg Thr Leu Glu Leu Lys Ala  
 65                  70                  75                  80  
 Ser Asn Gln Arg Leu Ser Gln Ser Asn Asp Glu Leu Glu Ala Ala Lys  
           85                  90                  95  
 Leu Thr Ala Leu  
                   100

<210> 2255  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

<400> 2255  
 nngctagcac atgagaagtg tgaagtttat actttgcttg ggcgatcacg ccgttttcca  
 60  
 aatatggctc atgcaacttc tggccaaagg ggtcacattg agcgtgctgc tatcaatgct  
 120  
 cctgtacagg gcagtgcagc tgatgttgct atgtgtgcaa tgcttgagat agacaggaat  
 180  
 actcgtctta aggagcttgg ttggacgcta ctcttgacagg tgcattgatga agtgatactg  
 240  
 gaagggcctt cagagtctgc ggagtnggcc aagtccatag ttgttgagtg catgtctaag  
 300  
 cccttctatg gcaccaatat cctgaggggc gaccttgctg ttgatgccaa gtgtgca  
 357

<210> 2256  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 2256  
 Xaa Leu Ala His Glu Lys Cys Glu Val Tyr Thr Leu Leu Gly Arg Ser  
   1                  5                  10                  15  
 Arg Arg Phe Pro Asn Met Ala His Ala Thr Ser Gly Gln Arg Gly His  
           20                  25                  30  
 Ile Glu Arg Ala Ala Ile Asn Ala Pro Val Gln Gly Ser Ala Ala Asp  
           35                  40                  45  
 Val Ala Met Cys Ala Met Leu Glu Ile Asp Arg Asn Thr Arg Leu Lys  
           50                  55                  60  
 Glu Leu Gly Trp Thr Leu Leu Leu Gln Val His Asp Glu Val Ile Leu

```

65              70              75              80
Glu Gly Pro Ser Glu Ser Ala Glu Xaa Ala Lys Ser Ile Val Val Glu
              85              90              95
Cys Met Ser Lys Pro Phe Tyr Gly Thr Asn Ile Leu Arg Val Asp Leu
              100              105              110
Ala Val Asp Ala Lys Cys Ala
              115

```

<210> 2257  
 <211> 626  
 <212> DNA  
 <213> Homo sapiens

<400> 2257  
 nnaatgacaa aaaatatgaa ccaaaatagt gacagtggca gtacaaataa ctataaaagc  
 60  
 ctgaaaccta aattagaaaa tctgagttct ttaccaccag attctgacag aacatcagaa  
 120  
 gtatatctac atgaagaatt acagcaggac atgcaaaagt ttaagaatga ggtcaacaca  
 180  
 ttagaagaag agttcctggc tttgaagaaa gaaaatgttc aacttcataa agagggtgaa  
 240  
 gaagaaatgg agaagcacag aagtaatagc acagaattat caggaaccct aactgatggg  
 300  
 actactgttg gcaatgatga tgatggacta aatcagcaga ttctaggaa ggaaatgaa  
 360  
 gagcatgaca ggctgcaga taaaacagct aatgaaaaga acaagggtcaa aaaccaaata  
 420  
 tatcctgagg ctgactttgc tgactcaatg gagccatctg aaatagcctc agaggattgt  
 480  
 gaattgtctc actctgttta tgagaatttt atgttgctga ttgaacaact tagaatggag  
 540  
 tataaaggta ggaccactgc ataaatgcaa ggccctttga tgtatcctgc agtaatgtgt  
 600  
 gtatacattg ctgagaactg acgcgt  
 626

<210> 2258  
 <211> 187  
 <212> PRT  
 <213> Homo sapiens

<400> 2258  
 Xaa Met Thr Lys Asn Met Asn Gln Asn Ser Asp Ser Gly Ser Thr Asn  
 1 5 10 15  
 Asn Tyr Lys Ser Leu Lys Pro Lys Leu Glu Asn Leu Ser Ser Leu Pro  
 20 25 30  
 Pro Asp Ser Asp Arg Thr Ser Glu Val Tyr Leu His Glu Leu Gln  
 35 40 45  
 Gln Asp Met Gln Lys Phe Lys Asn Glu Val Asn Thr Leu Glu Glu Glu  
 50 55 60  
 Phe Leu Ala Leu Lys Lys Glu Asn Val Gln Leu His Lys Glu Val Glu  
 65 70 75 80  
 Glu Glu Met Glu Lys His Arg Ser Asn Ser Thr Glu Leu Ser Gly Thr

```

      85              90              95
Leu Thr Asp Gly Thr Thr Val Gly Asn Asp Asp Asp Gly Leu Asn Gln
      100              105              110
Gln Ile Pro Arg Lys Glu Asn Glu Glu His Asp Arg Pro Ala Asp Lys
      115              120              125
Thr Ala Asn Glu Lys Asn Lys Val Lys Asn Gln Ile Tyr Pro Glu Ala
      130              135              140
Asp Phe Ala Asp Ser Met Glu Pro Ser Glu Ile Ala Ser Glu Asp Cys
145              150              155              160
Glu Leu Ser His Ser Val Tyr Glu Asn Phe Met Leu Leu Ile Glu Gln
      165              170              175
Leu Arg Met Glu Tyr Lys Gly Arg Thr Thr Ala
      180              185

```

<210> 2259  
 <211> 425  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2259
acgcgtcaca atgataaagc cattatatctc atcaagaggt aaatcattct tgaaattttc
60
taaaggtaaa cacttacgtg taacacgttc atcaaagaat tcaggaacca catattctgg
120
acggtcattc acgactgtaa cagcacagcc aataaacaat agcaaatcag taatagctcg
180
gctaacatga cctgcaccta atacgagaac tgacggatca ttttctacag gttgtacgaa
240
acactccatt tcgcctacca tgcatagaga attcagcttt gctttatcta cagtaaatcc
300
ttcaatagga gttccgtata gaacccttcc atcttcagca taaatagtct tatccccttg
360
acgaggaccg gatagaacgg taaccattac ggtagcttca gtaacctgta gacgattttt
420
catga
425

```

<210> 2260  
 <211> 141  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2260
Met Lys Asn Arg Leu Gln Val Thr Glu Ala Thr Val Met Val Thr Val
1      5      10      15
Leu Ser Gly Pro Arg Gln Gly Asp Lys Thr Ile Tyr Ala Glu Asp Gly
20     25     30
Arg Val Leu Tyr Gly Thr Pro Ile Glu Gly Phe Thr Val Asp Lys Ala
35     40     45
Lys Leu Asn Ser Leu Cys Met Val Gly Glu Met Glu Cys Phe Val Gln
50     55     60
Pro Val Glu Asn Asp Pro Ser Val Leu Val Leu Gly Ala Gly His Val
65     70     75     80
Ser Arg Ala Ile Thr Asp Leu Leu Leu Phe Ile Gly Cys Arg Val Thr

```

				85					90					95				
Val	Val	Asp	Asp	Arg	Pro	Glu	Tyr	Val	Val	Pro	Glu	Phe	Phe	Asp	Glu			
			100						105				110					
Arg	Val	Thr	Arg	Lys	Cys	Leu	Pro	Leu	Glu	Asn	Phe	Lys	Asn	Asp	Leu			
		115					120					125						
Pro	Leu	Asp	Glu	Tyr	Asn	Gly	Phe	Ile	Ile	Val	Thr	Arg						
		130				135					140							

```
<210> 2261
<211> 660
<212> DNA
<213> Homo sapiens
```

```
<400> 2261
ngctagctgc tgctcctgag gatcgggcgc agaattattgc tgcgatctg tccgggttgc
60
ttgagcccaa gcgcgaggtc gatgtgtccg gcgaccgcgc gcgttgccgt gggagcatag
120
tgtcggtgca cgctgaccga gaggtccgtg cggagagtag tcccgatgat atttgcgggc
180
agctcgatgc cgtggccgcc atgatggccc ttgtctatgg gtcgaattgt actattcccg
240
acgatgccgg gaggtctctt gacaagcttc actgaacggt gttcaattgg tcccaacggc
300
tgcccatgtg ggcagccgct ctatctctgc atgggaagga acccgatgac gtcacgcaat
360
gggtttccagg ccaccgacct ggctcttctc gcgggtctttg cagccctcat tgcgtgtcta
420
gccgtcatcc cgccgatggt catgggtgggg gcgggtccctt ttgcccttca gatgggttgc
480
gtcatgctgg cgccgatggt gctgggaagt atccgtggcg gatgcgcggt aggccttgat
540
atccttgctg gcgcgctggg gctgcccgtc ttcagcggtg ggtctagcgg gattggcgtc
600
ctggtagggc ccactgggtg gtatctatgg ggatggctga tcggcgcttt cgtggcgggt
660
```

```
<210> 2262
<211> 139
<212> PRT
<213> Homo sapiens
```

```

<400> 2262
Met Pro Gly Gly Ser Ser Thr Ser Phe Thr Glu Arg Cys Ser Ile Gly
 1                               5                               10          15
Pro Asn Gly Gly Cys Pro Cys Gly Gln Pro Leu Tyr Leu Val Met Gly Arg
                               20                               25          30
Asn Pro Met Ser Ser Arg Asn Gly Phe Gln Ala Thr Asp Leu Ala Leu
          35                               40                               45
Ile Ala Val Phe Ala Ala Leu Ile Ala Val Leu Ala Val Ile Pro Pro
          50                               55                               60
Met Phe Met Val Gly Ala Val Pro Phe Ala Leu Gln Met Val Ala Val
65                               70                               75          80
Met Leu Ala Pro Met Val Leu Gly Ser Ile Arg Gly Gly Cys Ala Val

```

85 90 95  
 Gly Leu Tyr Ile Leu Val Gly Ala Leu Gly Leu Pro Val Phe Ser Gly  
 100 105 110  
 Gly Ser Ser Gly Ile Gly Val Leu Val Gly Pro Thr Gly Gly Tyr Leu  
 115 120 125  
 Trp Gly Trp Leu Ile Gly Ala Phe Val Ala Gly  
 130 135

<210> 2263  
 <211> 491  
 <212> DNA  
 <213> Homo sapiens

<400> 2263  
 nacgcgttcc cggtcgaccg aggc aaaggc aaaagtaagc aggggtgccc tagtccccgt  
 60  
 tcccaccgcg gtatggctgg gtcactgctg acagatggcg tccccctgct gatctttccg  
 120  
 gagggcaccc ggtctcgac cggcgaatg ggcaccttca aacctggggc tgccgcattg  
 180  
 gctatttcac gtgggggttcc ggttatcccg attgctttag taggagcatg ggcggctatg  
 240  
 ccgtccgagc aagccagggt accaaaagga cgtccattgg tccacgtggc tattggacac  
 300  
 cctatggacc ctgttccccg cgagatcgcc caccaattct ccgaacggat tcgtcgccag  
 360  
 gtcattgagt tgcacgacca aaccgcccgc gcctacggca tgccaaccct tgacgaatac  
 420  
 ggacgccacc gcgcgctaag ccaggcctcc gagagcggcg acaccgcac caccaaccac  
 480  
 tcgacgtgca c  
 491

<210> 2264  
 <211> 163  
 <212> PRT  
 <213> Homo sapiens

<400> 2264  
 Xaa Ala Phe Pro Val Asp Arg Gly Lys Gly Lys Ser Lys Gln Gly Ala  
 1 5 10 15  
 Arg Ser Pro Arg Ser His Arg Gly Met Ala Gly Ser Leu Leu Thr Asp  
 20 25 30  
 Gly Val Pro Leu Leu Ile Phe Pro Glu Gly Thr Arg Ser Arg Thr Gly  
 35 40 45  
 Ala Met Gly Thr Phe Lys Pro Gly Ala Ala Ala Leu Ala Ile Ser Arg  
 50 55 60  
 Gly Val Pro Val Ile Pro Ile Ala Leu Val Gly Ala Trp Ala Ala Met  
 65 70 75 80  
 Pro Ser Glu Gln Ala Arg Leu Pro Lys Gly Arg Pro Leu Val His Val  
 85 90 95  
 Ala Ile Gly His Pro Met Asp Pro Val Pro Gly Glu Ile Ala His Gln  
 100 105 110  
 Phe Ser Glu Arg Ile Arg Arg Gln Val Ile Glu Leu His Asp Gln Thr

115	120	125
Ala Arg Ala Tyr Gly Met Pro Thr Leu Asp Glu Tyr Gly Arg His Arg		
130	135	140
Ala Leu Ser Gln Ala Ser Glu Ser Gly Asp Thr Ala Ser Thr Asn His		
145	150	155
Ser Thr Cys		160

&lt;210&gt; 2265

&lt;211&gt; 328

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2265

```

ccatgggaat aggccaaacac ggatggatct actgtataac ttgcctgccca tcaggaaaga
60
gtcaacacgg cagacacatg ctggcagaaa ccctgctgga gttgccctg agcattgatg
120
cataccaccc gagaggagga gaggggtggtg ggagaaatca gatcagagtt caaaatgcac
180
cggaagggtc cggaaatgta agactgcacc ttgcaggaac tgtcaatgcc actaccaata
240
tcaactcatt acgtcaagca cttgagagca gctgcgaaca caattctctg actcctaacc
300
tttagcacgt gactgggacc actggaca
328

```

&lt;210&gt; 2266

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2266

Met Gly Ile Gly Gln His Gly Trp Ile Tyr Cys Ile Thr Cys Leu Pro	
1 5 10 15	
Ser Gly Lys Ser Gln His Gly Arg His Met Leu Ala Glu Thr Leu Leu	
20 25 30	
Glu Leu Pro Leu Ser Ile Asp Ala Tyr His Pro Arg Gly Gly Glu Gly	
35 40 45	
Gly Gly Arg Asn Gln Ile Arg Val Gln Asn Ala Pro Glu Gly Leu Gly	
50 55 60	
Asn Val Arg Leu His Leu Ala Gly Thr Val Asn Ala Thr Thr Asn Ile	
65 70 75 80	
Thr His Leu Arg Gln Ala Leu Glu Ser Ser Cys Glu His Asn Ser Leu	
85 90 95	
Thr Pro Asn Leu	
100	

&lt;210&gt; 2267

&lt;211&gt; 370

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2267

agatctatgc aggtagcgct ggtctccggg gggtaagttg tccactccct gtcagatggc  
 60  
 agaccatgga gggctaatagc aggctgggaa ggctaggcag agttcccaga aacaggtcac  
 120  
 cgagggagcc accactgaat tgcactctcg ctggggagtt aagccatata cccctaagac  
 180  
 agcagtgacc ggagtggcca atctgtacag ggacaggctc aaggccacag caactcaggg  
 240  
 gacagagatg gtgaagcagg catgtcctaa agcctccctt cttaaccctg accttgaagg  
 300  
 acaggaaaca agtcatttac gtatgttgta ggcctagagc aagggtattgc agagatgggc  
 360  
 gtcaacgcgt  
 370

<210> 2268

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2268

Met	Ala	Asp	His	Gly	Gly	Leu	Met	Gln	Ala	Gly	Lys	Ala	Arg	Gln	Ser
1				5				10						15	
Ser	Gln	Lys	Gln	Val	Thr	Glu	Gly	Ala	Thr	Thr	Glu	Leu	His	Ser	Arg
			20					25					30		
Trp	Gly	Val	Lys	Pro	Tyr	Pro	Pro	Lys	Thr	Ala	Val	Thr	Gly	Val	Ala
			35					40					45		
Asn	Leu	Tyr	Arg	Asp	Arg	Leu	Lys	Ala	Thr	Ala	Thr	Gln	Gly	Thr	Glu
	50					55					60				
Met	Val	Lys	Gln	Ala	Cys	Pro	Lys	Ala	Ser	Leu	Leu	Asn	Pro	Asp	Leu
65					70					75					80
Glu	Gly	Gln	Glu	Thr	Ser	His	Leu	Arg	Met	Leu					
			85							90					

<210> 2269

<211> 507

<212> DNA

<213> Homo sapiens

<400> 2269

ctctccgacc gcgtcaaccc cggcaatata cgcaagttcg acgaccagat cgaatcgatt  
 60  
 tgtaaggctg ccaccgagca cggtagcagc atccgaatcg gcgtgaatgc tgggtctctc  
 120  
 gacaaacgtc tgcttgacaa atacggagcc cggaccgccg aggctatggt ggagtcggca  
 180  
 ctgtgggagg ccagcctctt tgagcaatac ggattccggg atttcaaaat ctcggtgaag  
 240  
 caccacgacc cggtcgtcat gatccgtgcc tatgaacagc tcgccgcaa atgcgattat  
 300  
 ccccttcatt tgggcgttac tgaggtggt ccggccttcc aaggcaccat caagtcggcg  
 360  
 gtggccttcg ggcattctct tgccgagggt atcggcgata ccatacgctg ctccttctcg  
 420



gctgatccgg tcgaggaagt caaggtgggt atcaagatcc tggagtcgct caacctacgt  
 480  
 cctcgaggtc tagagatcgt ctctcgc  
 507

<210> 2270

<211> 169

<212> PRT

<213> Homo sapiens

<400> 2270

Leu	Ser	Asp	Arg	Val	Asn	Pro	Gly	Asn	Ile	Arg	Lys	Phe	Asp	Asp	Gln
1				5					10					15	
Ile	Glu	Ser	Ile	Cys	Lys	Ala	Ala	Thr	Glu	His	Gly	Thr	Ser	Ile	Arg
			20					25					30		
Ile	Gly	Val	Asn	Ala	Gly	Ser	Leu	Asp	Lys	Arg	Leu	Leu	Asp	Lys	Tyr
	35					40						45			
Gly	Ala	Pro	Thr	Ala	Glu	Ala	Met	Val	Glu	Ser	Ala	Leu	Trp	Glu	Ala
	50					55				60					
Ser	Leu	Phe	Glu	Gln	Tyr	Gly	Phe	Arg	Asp	Phe	Lys	Ile	Ser	Val	Lys
65				70					75					80	
His	His	Asp	Pro	Val	Val	Met	Ile	Arg	Ala	Tyr	Glu	Gln	Leu	Ala	Ala
			85					90					95		
Lys	Cys	Asp	Tyr	Pro	Leu	His	Leu	Gly	Val	Thr	Glu	Ala	Gly	Pro	Ala
	100							105					110		
Phe	Gln	Gly	Thr	Ile	Lys	Ser	Ala	Val	Ala	Phe	Gly	His	Leu	Leu	Ala
	115						120					125			
Glu	Gly	Ile	Gly	Asp	Thr	Ile	Arg	Val	Ser	Leu	Ser	Ala	Asp	Pro	Val
	130					135				140					
Glu	Glu	Val	Lys	Val	Gly	Ile	Lys	Ile	Leu	Glu	Ser	Leu	Asn	Leu	Arg
145				150					155					160	
Pro	Arg	Gly	Leu	Glu	Ile	Val	Ser	Cys							
				165											

<210> 2271

<211> 573

<212> DNA

<213> Homo sapiens

<400> 2271

nncgcccacc cggacttcca ggagatgtta cgtgcgctgg tggacttcga cgaagacatc  
 60  
 ccgatggtcg acgaaagcct ggaacagttc gccagttgc tcaaaacccg cacctcggaa  
 120  
 gaaggcatgg cgccgttgac ctccggacgcg gtggcgcggt tggccactta cagcgcacgg  
 180  
 ctggcggacc accaaggggc tgtgtccgcg cgcattggcg acttgttcca actggtcagc  
 240  
 gaggcggact ttatccgccca cctggcgggc gacgagatga ctgatgccgg ccatatcgaa  
 300  
 cgggcgctca aggccaaggc cagcgcgtacc gggcgtgtat cggcgcggat tctcgacgac  
 360  
 atgctcgtcg gggtcacact gatcgacacc gccggtgcgg ccgtgggcaa atgcaacggg  
 420

ctgacgggtgc tggaagtcgg cgattcggcg ttcggcgtgc cggcgcggtat ttccgccacg  
480  
gtgtacccgg ggcgcagcgg cattgtcgac atcgagcgcg aagttaacct cggccagccg  
540  
atccactcca agggcgtgat gatccttacc ggt  
573

<210> 2272  
<211> 191  
<212> PRT  
<213> Homo sapiens

<400> 2272  
Xaa Ala Asp Pro Asp Phe Gln Glu Met Leu Arg Ala Leu Val Asp Phe  
1 5 10 15  
Asp Glu Asp Ile Pro Met Val Asp Glu Ser Leu Glu Gln Phe Ala Gln  
20 25 30  
Leu Leu Lys Thr Arg Thr Ser Glu Gly Met Ala Pro Leu Thr Ser  
35 40 45  
Asp Ala Val Ala Arg Leu Ala Thr Tyr Ser Ala Arg Leu Ala Asp His  
50 55 60  
Gln Gly Arg Val Ser Ala Arg Ile Gly Asp Leu Phe Gln Leu Val Ser  
65 70 75 80  
Glu Ala Asp Phe Ile Arg His Leu Ala Gly Asp Glu Met Thr Asp Ala  
85 90 95  
Gly His Ile Glu Arg Ala Leu Lys Ala Lys Ala Thr Arg Thr Gly Arg  
100 105 110  
Val Ser Ala Arg Ile Leu Asp Asp Met Leu Ala Gly Val Ile Leu Ile  
115 120 125  
Asp Thr Ala Gly Ala Ala Val Gly Lys Cys Asn Gly Leu Thr Val Leu  
130 135 140  
Glu Val Gly Asp Ser Ala Phe Gly Val Pro Ala Arg Ile Ser Ala Thr  
145 150 155 160  
Val Tyr Pro Gly Gly Ser Gly Ile Val Asp Ile Glu Arg Glu Val Asn  
165 170 175  
Leu Gly Gln Pro Ile His Ser Lys Gly Val Met Ile Leu Thr Gly  
180 185 190

<210> 2273  
<211> 4355  
<212> DNA  
<213> Homo sapiens

<400> 2273  
tctttccagc atgcctccgg cttcttgggg gaacacagtc ccggtggtca gaggtcctgc  
60  
aggggaggcc tctctctgga acgcctaccc aactccatcg cctcccgtt ccgcctgaca  
120  
gagagggagg aggaagtgat cacctgtttt gagagggcct cctggatcgc tcaggtgttc  
180  
ctgcaggaat tggagaagac cacaataaac agcacgtcga ggcattctgaa aggctgtcac  
240  
ccgcttgact atgagctcac ctacttcttg gaagctgcc tccagagcgc ctatgtgaaa  
300

aacctgaaga aggggaacat cgtgaagggc atgagagagc tccgggaggt gctgcggact  
360  
gtggagacca aagcaactca gaacttcaaa gtgatggcgg ccaagcacct ggcgggggtc  
420  
ctgctgcact ccctgagtgg agtgctactg gagccccctg tcccaccctc tgcttgagtt  
480  
atgggcaagg aggagagttc tttcgcact caggccctgc ggaaacctca cctctatgaa  
540  
ggagacaacc tctactgccc caaggacaac atcgaggaag ccctcctgct cctcctcatc  
600  
agcgaatcca tggcaactcg agatgtggtg ctgagccggg tgccggagca ggaggaggac  
660  
cggacagtga gcttgacaaa tgccgcagcc atctatgacc tcttgagcat cacttggtgg  
720  
agaaggggac agtacgtcat gctctcggag tgcctggagc gagccatgaa gtttgcgttt  
780  
ggagaatttc acctttggtg ccaggtggcc ctctccatgg tggcttggtg gaagtcagcc  
840  
tacgtgtgtt ccctgctgcg ggagtgtgtg aagttgcggc cctcggaccc caccgtgccc  
900  
ctgatggccg cgaaggtctg catcggtgcc ctctcgtggc tagaggaagc agagcacttt  
960  
gccatgatgg tgatcagcct cggagaggaa gccggggagt tctcccccaa gggctacctg  
1020  
gctctgggtc tcacctatag cctgcaggcc accgacgcca cctgaagtc caagcaagat  
1080  
gaattgcacc ggaaggcact gcagacgctg gagagggctc agcagctggc gccagtgac  
1140  
ccccaggta tctctatgt ctgctgcag ctggccctcg tccgacagat ctccagtgc  
1200  
atggagcagc tgcaggaggc cctgaaggta cgcaaggatg atgcccacgc cctccacctg  
1260  
ctggcactgc tcttctctgc ccagaagcac caccagcatg ccctggatgt tgtcaacatg  
1320  
gccatcaccg agcaccctga gaacttcaac ctgatgttca ccaaggtgaa gctggagcag  
1380  
gtgctgaaag gccagagga agccctcgtg acctgcagac aagtgtgag gctgtggcag  
1440  
acctgtaca gcttctccca gctgggaggc ctagaaaagg atggcagctt cggtgagggc  
1500  
ctcaccatga agaagcagag tggcatgcac ctgactttgc ctgatgcca tgatgcagac  
1560  
tctggctccc ggcgggcttc gtccatcgcc gcctccggc tggaggaggc catgtcagag  
1620  
ctgactatgc cctcttcggt cctgaagcag ggcccatgc agctgtggac cactgtggaa  
1680  
cagatctggc tgcaggctgc tgagctgttc atggagcagc agcacctcaa ggaagcaggt  
1740  
ttctgcatcc aggaggcggc gggcctcttc ccaacttctc actcagtact ctatatgcgg  
1800  
ggccggctgg ctgaggtgaa gggcaacctg gaggaggcca agcagctgta caaggaggcg  
1860  
ctcagggtga acccagatgg cgtgcgcac atgcatagcc tgggtctgat gctgagtcgg  
1920

ctgggccaca agagcttggc ccagaagggtg cttcgtgatg ccgtggagag gcagagtacg  
1980  
tgccacgagg cgtggcaggg cctgggcgag gtgctgcagg cccagggcca gaacgaggct  
2040  
gccgttgact gcttcctcac cgccttgag ctggaggcca gcagccctgt actgcccttc  
2100  
tccatcatcc ccagagagct ctgacgacgc tgcagccgca gggagggagg ggctggccag  
2160  
agggagaggc agcagggaaac gtgggtcagg gtggggcaac agtggcatca ggtgcggggc  
2220  
ctcagggaaa tacatcttta gtgaacgcct ctgcagctgc agccctcgtt ctcttggtg  
2280  
ggccaagagg gccttcttgg atttctttgt tgggtgccttg ggaaacagtc tgacttgaac  
2340  
cctaagtgcc tttggagagt tttgtggtga ccagacttgc tccccaagag ctgggcagcg  
2400  
gggagcctca cagctgtcct tcacctcac ccatgcctct ggcttggggg ctgggtgggg  
2460  
ggttctcact cccactctc agcacagtac agacttcttg atctctctca ggtcttgccc  
2520  
agggcggtca caatgtgaag aaactgcggg caagtgggaa gactatgaga tttctgggtt  
2580  
cccttctcag acttgagtt agtagatgat tcctgcattg cccctgcttg ccctctgaga  
2640  
ccagctgggc ccaccttgc tctttcccc tgctaccaag tgcctttggg gcctctgggg  
2700  
tctgaccagg ggtactgagc accggcccta acacttccat ctccaccac cccatctccc  
2760  
tggcgatgtg ctccagccca agcagcctcc gtaggcttta gatcctgtgg ttgccagatc  
2820  
cagtccttcc taataccctg agtcaacaca ttactcctgc aggtcttagg ctacaatgca  
2880  
ggtcccttga gggccacca catggaggta ggcagtttct aggactgtcc ccagtacatc  
2940  
tcaccacca cagccctttt tttgccttga ttcgagcctc accctggcct tttggcttcc  
3000  
cctgcctgag agagacctga ggaggggaca gagccagcc cctctcctgt ggctgagcag  
3060  
gcctctgtgt ccatgacacc tgtcttcggg gcctgggggc tgtgggtgta tgtcctccct  
3120  
actggcttcc ccggccctg ctgcatgatg ctcttggaac tcttcccaa ggagtcagtc  
3180  
cccaggcct atcaggggat ccttttgat ctgcactttg ggttttagtt tcaaagctcc  
3240  
atcaggta ca gcttgcatct caggatgtgt ggaaagctcg ggtgagggtc gccctgggtc  
3300  
atcatagctc caccttctc ggaaggagtg ggctgttgga gacccccat ccatggcaca  
3360  
ctagctcagc actgcatttc ccgagatgat tcccaagaca gctggtgcct cctggcttcc  
3420  
ctgtgccagg ccaaggggca ccacagagga ccctggatcc tttgcctctt cttggttgaa  
3480  
ggatctctat gtatgtgtgt atataaatat agttttttat ctatatatat aaaatagaga  
3540













			20					25					30			
Ser	Lys	Phe	Arg	Arg	Lys	Phe	Ile	Val	Lys	Tyr	Ser	Ala	Thr	Ser	Phe	
		35					40					45				
Leu	Leu	Cys	His	Leu	Gly	Gly	Gly	Cys	Asn	Phe	Pro	His	His	Cys	Arg	
	50					55					60					
Val	Leu	Arg	Asn	Arg	Leu	Gln	Pro	Cys	His	Arg	Ser	Ser	Gln	Leu	His	
65					70					75					80	
Gln	Ala	Phe	Gly	Arg	Ala	Val	Ile	Arg	Leu	Pro	Ala	Lys	Ala	Gln	Ala	
			85						90					95		
Ser	His	Ala	Thr	Ser	Ser	Pro	Lys	Met	Arg	Lys	Val	Arg	Thr	Arg	Lys	
			100					105					110			
Gln	Gly	Ala	Val	Glu	Arg	Ser	Ser	Ala	Pro							
		115					120									

```
<210> 2285
<211> 6505
<212> DNA
<213> Homo sapiens
```

```

<400> 2285
ccggttcctg ccatgcccg cggcccccagt ccccgagcc cgcgccttt gctgcgcccc
60
ctcctcctgc tctctctgcgc tctggctccc ggcgcccccg gacccgcacc aggacgtgca
120
accgaggggc gggcggcact ggacatcgtg caccgggttc gagtcgacgc ggggggctcc
180
ttcctgtcct acgagctgtg gccccgcgca ctgcgcaagc gggatgtatc tgtgcgccga
240
gacgcgcccc cttctacga gctacaatac cgcgggcgcg agctgcgctt caacctgacc
300
gccaatcagc acctgctggc gcccggttt gtgagcgaga cgcggcggcg cggcggcctg
360
ggcgcgcgc acatccgggc ccacaccccg gcctgccacc tgcttgcgca ggtgcaggac
420
cctgagctcg aggggtggcct ggcggccatc agcgctgcg acggcctgaa aggtgtgttc
480
cagctctcca acgaggacta cttcattgag cccctggaca gtgccccggc ccggcctggc
540
cacgcccagc cccatgtggt gtacaagcgt cagggccccg agaggctggc acagcggggt
600
gattccagtg ctccaagcac ctgtagtgc agtgtacca gagctggagt ctcgacggga
660
gcgttgggag cagcggcagc agtggcggcg gccacggcta ggcgtctaca ccagcggctg
720
gtcagcaaag agaagtgggt ggagaccctg gtagtagctg atgccaaaat ggtggagtac
780
cacggacagc cgcaggttga gagctatgtg ctgaccatca tgaacatggg ggctggcctg
840
tttcatgacc ccagcattgg gaaccccatc cacatcacca ttgtgcgcct ggtcctgctg
900
gaagatgagg aggaggacct aaagatcacg caccatgcag acaacaccct gaagagcttc
960
tgcaagtggc agaaaagcat caacatgaag ggggatgcc atcccctgca ccatgacact
1020

```

gccatcctgc tcaccagaaa ggacctgtgt gcagccatga accggccctg tgagaccctg  
1080  
ggactgtccc atgtggcggg catgtgccag ccgcaccgca gctgcagcat caacgaggac  
1140  
acgggcctgc cgttggcctt cactgtagcc cagagctcg ggcacagttt tggcattcag  
1200  
catgacggaa gcggcaatga ctgtgagccc gttgggaaac gacctttcat catgtctcca  
1260  
cagctcctgt acgacgccgc tccccacc tggccccgt gcagccgcca gtatatcacc  
1320  
aggttccttg accgtgggtg gggcctgtgc ctggacgacc ctctgcca ggacattatc  
1380  
gacttccctt cggtgccacc tggcgtctc tatgatgtaa gccaccagt cgcctccag  
1440  
tacggggcct actctgcctt ctgcgaggac atggataat tctgccacac actctggtgc  
1500  
tctgtgggga ccacctgtca ctccaagctg gatgcagctg tggacggcac ccggtgtggg  
1560  
gagaataagt ggtgtctcag tggggagtgc gtaccctgg gcttccggcc cgaggccgtg  
1620  
gatggtggct ggtctggctg gagcgctgg tccatctgct cagggagctg tggcatgggg  
1680  
gtacagagcg ccgagcggca gtgcacgcag cctacgccc aatacaaagg cagatactgt  
1740  
gtgggtgagc gcaagcgctt ccgcctctgc aacctgcagg cctgccctgc tggccgcccc  
1800  
tccttcgcc acgtccagt cagccactt gacgctatgc tctacaagg ccagctgcac  
1860  
acatgggtgc ccgtggtaaa tgacgtgaac ccctgcgagc tgcactgcc gcccgcgaat  
1920  
gagtactttg ccaagaagct gcgggacgcc gtggtcgatg gcacccctg ctaccaggtc  
1980  
cgagccagcc gggacctctg catcaacggc atctgtgaaga acgtgggctg tgacttcgag  
2040  
attgactccg gtgctatgga ggaccgctgt ggtgtgtgcc acggcaacgg ctccacctgc  
2100  
cacaccgtga gcgggacctt cnngaggagg ccgagggctn tggggtatgt ggatgtggg  
2160  
ctgatcccag cgggcgcacg cgagatccgc atccaagagg ttgccgaggc tgccaacttc  
2220  
ctggcactgc ggagcgagga cccggagaag tacttctca atggtggctg gaccatccag  
2280  
tggaacgggg actaccaggt ggcagggacc accttcacat acgcacgcag gggcaactgg  
2340  
gagaacctca cgtccccggg tcccaccaag gagcctgtct ggatccaggt gcctgcctcc  
2400  
cgtggcccag gcggggggag cagaggcgga gtccccaggc ccagaccct ccatggcagg  
2460  
tctcgtctg gaggagttag ccctggttca gtcacagagc ctggctctga gccaggccct  
2520  
ctgctgcgg cctctacctc agtttcccca tctttaaaat ggccaatct tgtagctgca  
2580  
gttcacagag gtggctgggg tcaagctcct ttaggactgg gtggatggag aagacacct  
2640

gtgctcatgg gccccgcct gccaccacag ctgctgttcc aggagagcaa ccttggggtg  
2700  
cactacgagt acaccatcca caggaggca ggtggccacg acgaggctcc gccgcccgtg  
2760  
ttctcctggc attatgggcc ctggaccaag tgcacagtca cctgcggcag aggtgtgcag  
2820  
aggcagaatg tgtactgctt ggagcggcag gcaggggccc tggacgagga gcactgtgac  
2880  
cccttgggcc ggcctgatga ccaacagagg aagtgcagcg agcagccctg ccctgccagg  
2940  
tgggtggcag gtgagtggca gctgtgctcc agctcctgcg ggcttggggg cctctcccgc  
3000  
cgggcccgtg tctgcatccg cagcgtgggg ctggatgagc agagcgccct ggagccaccc  
3060  
gcctgtgaac accttccccg gcccctact gaaacccctt gcaaccgcca tgtaccctgt  
3120  
ccggccacct gggctgtggg gaactggctt cagtgtctag tgacatgtgg ggagggcact  
3180  
cagcgccgaa atgtcctctg caccaatgac accggtgtcc cctgtgacga ggcccagcag  
3240  
ccagccagcg aagtcacctg ctctctgcca ctctgtcggg ggcccctggg cacactgggc  
3300  
cctgaaggct caggcagcgg ctctccagc cagcagctct tcaacgaggc tgacttcac  
3360  
ccgcaccacc tggccccacg cccttcaccc gcctcatcac ccaagccagg caccatgggc  
3420  
aacgccattg aggaggaggc tccagagctg gacctgccgg ggcccgtgtt tgtggacgac  
3480  
ttctactacg actacaattt catcaatttc cagcaggatc tgtcctacgg gccctctgag  
3540  
gagcccgatc tagacctggc ggggacaggg gaccggacgc ccccaccaca cagccatcct  
3600  
gctgcgccct ccacgggtag ccctgtgcct gccacagagc ctccctgcagc caaggaggag  
3660  
ggggactagg gaccttggtc cccgagccct tggcctagcc aggccggccg ctccccaccc  
3720  
ccaccctcag agcagacccc tgggaaccct ttgatcaatt tcctgcctga ggaagacacc  
3780  
cccatagggg cccagatct tgggctcccc agcctgtcct ggcccagggt ttccactgat  
3840  
ggcctgcaga cacctgccac ccctgagagc caaaatgatt tcccagttgg caaggacagc  
3900  
cagagccagc tgccccctcc atggcgggac aggaccaatg aggttttcaa ggatgatgag  
3960  
gaacccaagg gccgaggagc accccacctg ccccgagac ccagctccac gctgccccct  
4020  
ttgtcccctg ttggcagcac ccactcctct cctagtccctg acgtggcgga gctgtggaca  
4080  
ggaggcacag tggcctggga gccagctctg gagggtggcc tggggcctgt ggacagtga  
4140  
ctgtggccca ctgttggggg ggcttctctc cttcctctc ccatagcccc tctgccagag  
4200  
atgaaggta gggacagttc cctggagccg gggactccct ccttcccagc cccaggacca  
4260

ggctcatggg acctgcagac tgtggcagtg tgggggacct tcctcccccac aacctgact  
4320  
ggcctcgggc acatgcctga gcctgccctg aaccaggac ccaagggta gcctgagtc  
4380  
ctcagccctg aggtgcccct gagctctagg ctgctgtcca caccagcttg ggacagcccc  
4440  
gccaacagcc acagagtcctc tgagaccag ccgctggctc ccagcctggc tgaagcggg  
4500  
ccccccgcgg acccgttggt tgtcaggaac gccagctggc aagcgggaaa ctggagcgag  
4560  
tgtctacca cctgtggcct ggggtgggtc tggaggccgg tgcgctgtag ctccggccgg  
4620  
gatgaggact gcgccccgc tggccggccc cagcctgccc gccgctgcca cctgcggccc  
4680  
tgtgccacct ggcactcagg caactggagt aagtgtctcc gcagctgcgg cggaggttcc  
4740  
tcagtgcggg acgtgcagtg tgtggacaca cgggacctcc ggccactgcg gcccttccat  
4800  
tgtcagcccc ggccctgcaa gccgcctgcg caccggccct cgggggcccc gccctgcctc  
4860  
agctggtaca catcttctct gagggagtgc tccgaggcct gtggcggtgg tgagcagcag  
4920  
cgtctagtga cctgcccga gccaggcctc tgcgaggagg cgctgagacc caacaccacc  
4980  
cggccctgca acacccaccc ctgcacgcag tgggtgggtg ggccctgggg ccagtgtcta  
5040  
gccccctgtg gtggtgggtg ccagcggcgc ctggtcaagt gtgtcaacac ccagacagg  
5100  
ctgcccagg aagacagtga ccagtgtggc cacgaggcct ggccctgagag ctcccggccg  
5160  
tgtggcaccg aggattgtga gcccgctgag cctccccgct gtgagcggga ccgctgtcc  
5220  
ttcgggttct gcgagacgct gcgcctactg ggccgctgcc agctgcccac catccgcacc  
5280  
cagtgtgcc gctcgtgctc tccgccagc caccggccc cctcccagg ccatcagcgg  
5340  
gttgcgccg gctgactgtg ccaggatgca cagaccgacc gacagacctc agtgcacc  
5400  
acgggctgtg gcggagctcc cggccctgc gccctaatgg tgetaaccac ctctcactac  
5460  
ccagcagcag gctggggacc tcctccccct caaaaaagg atttttttat tctaacagtt  
5520  
tgtgtaacat ttattatgat ttacataaaa tgagcatcta ccattccaaa gcacagcatg  
5580  
acttcatctt ggatttggag aatcttaaaa gtgagaaact cttccccca ctctctgccc  
5640  
caaaaactcca ccgccacagc acctcggcag gcgcggttt tcacctgctc ctctggggca  
5700  
gatctgcagg gtacagagca gcaacaagt ccgtgagagc atggcgtctg gtgaggcacg  
5760  
ggccttgaa gctggggggc tgctgccag ggaggctat ctgcggaggg tcgggttctg  
5820  
ggggcaggaa ggtcttccgg gcaggggcac agctttgccc ttacttgcg cctgcctcta  
5880

gctcggctcc cagctttccc tggggcccca ctctgtggtc ctcagagacc tgttccacag  
 5940  
 ggattgggcc caccttgtca cttgcaggac tgccccttgg agtgatgggg actggggccc  
 6000  
 ccaggggcac ctccttgggc ctgttgatc tgttgactct tctgcaaaaa gtagacagag  
 6060  
 aagagagcag gctggcccg cgtgtctctac tgtgtctgtc ccaggactcg gaaggtaggg  
 6120  
 agggagcgtg gccagggcgg ctgcctgcag gtgcgtgtcc tgctgctccc caactcaaca  
 6180  
 tgctcacctc atttcacacc aacaagcccc atcctcagag gaggagccca aggctctgag  
 6240  
 aggaagtaac tggcccaagg gcacatgccc tggtagacaca ggcccatcct aggcctgac  
 6300  
 tgcccacctc caagtccag gccaccctga gcaggcccca gtggcagctt tgcacagaga  
 6360  
 gggcagcctg ccagagttca cacaggaaag caagttgctg ggcaagctag agtgagtccc  
 6420  
 agccccgctg tgctgcccga gggtagagga gcgtcaggcg tgcttctgt ctgtctgcag  
 6480  
 cagcccggtt ggcccaaaga gactc  
 6505

<210> 2286  
 <211> 1784  
 <212> PRT  
 <213> Homo sapiens

<400> 2286  
 Pro Val Pro Ala Met Pro Gly Gly Pro Ser Pro Arg Ser Pro Ala Pro  
 1 5 10 15  
 Leu Leu Arg Pro Leu Leu Leu Leu Cys Ala Leu Ala Pro Gly Ala  
 20 25 30  
 Pro Gly Pro Ala Pro Gly Arg Ala Thr Glu Gly Arg Ala Ala Leu Asp  
 35 40 45  
 Ile Val His Pro Val Arg Val Asp Ala Gly Gly Ser Phe Leu Ser Tyr  
 50 55 60  
 Glu Leu Trp Pro Arg Ala Leu Arg Lys Arg Asp Val Ser Val Arg Arg  
 65 70 75 80  
 Asp Ala Pro Ala Phe Tyr Glu Leu Gln Tyr Arg Gly Arg Glu Leu Arg  
 85 90 95  
 Phe Asn Leu Thr Ala Asn Gln His Leu Leu Ala Pro Gly Phe Val Ser  
 100 105 110  
 Glu Thr Arg Arg Arg Gly Gly Leu Gly Arg Ala His Ile Arg Ala His  
 115 120 125  
 Thr Pro Ala Cys His Leu Leu Gly Glu Val Gln Asp Pro Glu Leu Glu  
 130 135 140  
 Gly Gly Leu Ala Ala Ile Ser Ala Cys Asp Gly Leu Lys Gly Val Phe  
 145 150 155 160  
 Gln Leu Ser Asn Glu Asp Tyr Phe Ile Glu Pro Leu Asp Ser Ala Pro  
 165 170 175  
 Ala Arg Pro Gly His Ala Gln Pro His Val Val Tyr Lys Arg Gln Ala  
 180 185 190  
 Pro Glu Arg Leu Ala Gln Arg Gly Asp Ser Ser Ala Pro Ser Thr Cys

	195					200					205				
Ser	Ala	Ser	Val	Pro	Arg	Ala	Gly	Val	Ser	Thr	Gly	Ala	Leu	Gly	Ala
	210					215					220				
Ala	Ala	Ala	Val	Ala	Ala	Ala	Thr	Ala	Arg	Arg	Leu	His	Gln	Arg	Ser
225					230					235					240
Val	Ser	Lys	Glu	Lys	Trp	Val	Glu	Thr	Leu	Val	Val	Ala	Asp	Ala	Lys
				245					250					255	
Met	Val	Glu	Tyr	His	Gly	Gln	Pro	Gln	Val	Glu	Ser	Tyr	Val	Leu	Thr
			260					265					270		
Ile	Met	Asn	Met	Val	Ala	Gly	Leu	Phe	His	Asp	Pro	Ser	Ile	Gly	Asn
		275				280					285				
Pro	Ile	His	Ile	Thr	Ile	Val	Arg	Leu	Val	Leu	Leu	Glu	Asp	Glu	Glu
	290					295					300				
Glu	Asp	Leu	Lys	Ile	Thr	His	His	Ala	Asp	Asn	Thr	Leu	Lys	Ser	Phe
305					310					315					320
Cys	Lys	Trp	Gln	Lys	Ser	Ile	Asn	Met	Lys	Gly	Asp	Ala	His	Pro	Leu
				325					330					335	
His	His	Asp	Thr	Ala	Ile	Leu	Leu	Thr	Arg	Lys	Asp	Leu	Cys	Ala	Ala
		340						345					350		
Met	Asn	Arg	Pro	Cys	Glu	Thr	Leu	Gly	Leu	Ser	His	Val	Ala	Gly	Met
		355					360					365			
Cys	Gln	Pro	His	Arg	Ser	Cys	Ser	Ile	Asn	Glu	Asp	Thr	Gly	Leu	Pro
	370					375					380				
Leu	Ala	Phe	Thr	Val	Ala	His	Glu	Leu	Gly	His	Ser	Phe	Gly	Ile	Gln
385					390					395					400
His	Asp	Gly	Ser	Gly	Asn	Asp	Cys	Glu	Pro	Val	Gly	Lys	Arg	Pro	Phe
				405					410					415	
Ile	Met	Ser	Pro	Gln	Leu	Leu	Tyr	Asp	Ala	Ala	Pro	Leu	Thr	Trp	Ser
			420					425					430		
Arg	Cys	Ser	Arg	Gln	Tyr	Ile	Thr	Arg	Phe	Leu	Asp	Arg	Gly	Trp	Gly
		435					440					445			
Leu	Cys	Leu	Asp	Asp	Pro	Pro	Ala	Lys	Asp	Ile	Ile	Asp	Phe	Pro	Ser
	450					455					460				
Val	Pro	Pro	Gly	Val	Leu	Tyr	Asp	Val	Ser	His	Gln	Cys	Arg	Leu	Gln
465					470					475					480
Tyr	Gly	Ala	Tyr	Ser	Ala	Phe	Cys	Glu	Asp	Met	Asp	Asn	Val	Cys	His
				485					490					495	
Thr	Leu	Trp	Cys	Ser	Val	Gly	Thr	Thr	Cys	His	Ser	Lys	Leu	Asp	Ala
			500					505					510		
Ala	Val	Asp	Gly	Thr	Arg	Cys	Gly	Glu	Asn	Lys	Trp	Cys	Leu	Ser	Gly
		515					520					525			
Glu	Cys	Val	Pro	Val	Gly	Phe	Arg	Pro	Glu	Ala	Val	Asp	Gly	Gly	Trp
	530					535					540				
Ser	Gly	Trp	Ser	Ala	Trp	Ser	Ile	Cys	Ser	Arg	Ser	Cys	Gly	Met	Gly
545					550					555					

625					630					635				640	
Glu	Tyr	Phe	Ala	Lys	Lys	Leu	Arg	Asp	Ala	Val	Val	Asp	Gly	Thr	Pro
				645					650					655	
Cys	Tyr	Gln	Val	Arg	Ala	Ser	Arg	Asp	Leu	Cys	Ile	Asn	Gly	Ile	Cys
			660					665					670		
Lys	Asn	Val	Gly	Cys	Asp	Phe	Glu	Ile	Asp	Ser	Gly	Ala	Met	Glu	Asp
		675					680					685			
Arg	Cys	Gly	Val	Cys	His	Gly	Asn	Gly	Ser	Thr	Cys	His	Thr	Val	Ser
	690					695					700				
Gly	Thr	Phe	Xaa	Arg	Arg	Pro	Arg	Val	Xaa	Gly	Tyr	Val	Asp	Val	Gly
705					710				715						720
Leu	Ile	Pro	Ala	Gly	Ala	Arg	Glu	Ile	Arg	Ile	Gln	Glu	Val	Ala	Glu
				725					730					735	
Ala	Ala	Asn	Phe	Leu	Ala	Leu	Arg	Ser	Glu	Asp	Pro	Glu	Lys	Tyr	Phe
			740					745					750		
Leu	Asn	Gly	Gly	Trp	Thr	Ile	Gln	Trp	Asn	Gly	Asp	Tyr	Gln	Val	Ala
		755					760				765				
Gly	Thr	Thr	Phe	Thr	Tyr	Ala	Arg	Arg	Gly	Asn	Trp	Glu	Asn	Leu	Thr
770					775						780				
Ser	Pro	Gly	Pro	Thr	Lys	Glu	Pro	Val	Trp	Ile	Gln	Val	Pro	Ala	Ser
785					790					795					800
Arg	Gly	Pro	Gly	Gly	Gly	Ser	Arg	Gly	Gly	Val	Pro	Arg	Pro	Ser	Thr
				805					810					815	
Leu	His	Gly	Arg	Ser	Arg	Pro	Gly	Gly	Val	Ser	Pro	Gly	Ser	Val	Thr
			820					825					830		
Glu	Pro	Gly	Ser	Glu	Pro	Gly	Pro	Pro	Ala	Ala	Ala	Ser	Thr	Ser	Val
		835					840					845			
Ser	Pro	Ser	Leu	Lys	Trp	Pro	Asn	Leu	Val	Ala	Ala	Val	His	Arg	Gly
850						855						860			
Gly	Trp	Gly	Gln	Ala	Pro	Leu	Gly	Leu	Gly	Gly	Trp	Arg	Arg	His	Leu
865					870					875					880
Val	Leu	Met	Gly	Pro	Arg	Leu	Pro	Thr	Gln	Leu	Leu	Phe	Gln	Glu	Ser
				885					890					895	
Asn	Pro	Gly	Val	His	Tyr	Glu	Tyr	Thr	Ile	His	Arg	Glu	Ala	Gly	Gly
			900					905					910		
His	Asp	Glu	Val	Pro	Pro	Pro	Val	Phe	Ser	Trp	His	Tyr	Gly	Pro	Trp
		915						920					925		
Thr	Lys	Cys	Thr	Val	Thr	Cys	Gly	Arg	Gly	Val	Gln	Arg	Gln	Asn	Val
						935					940				
Tyr	Cys	Leu	Glu	Arg	Gln	Ala	Gly	Pro	Val	Asp	Glu	Glu	His	Cys	Asp
945					950					955					960
Pro	Leu	Gly	Arg	Pro	Asp	Asp	Gln	Gln	Arg	Lys	Cys	Ser	Glu	Gln	Pro
				965					970					975	
Cys	Pro	Ala	Arg	Trp	Trp	Ala	Gly	Glu	Trp	Gln	Leu	Cys	Ser	Ser	Ser
			980					985					990		
Cys	Gly	Pro	Gly	Gly	Leu	Ser	Arg	Arg	Ala	Val	Leu	Cys	Ile	Arg	Ser
		995						1000					1005		
Val	Gly	Leu	Asp	Glu	Gln	Ser	Ala	Leu	Glu	Pro	Pro	Ala	Cys	Glu	His
		1010					1015						1020		
Leu	Pro	Arg	Pro	Pro	Thr	Glu	Thr	Pro	Cys	Asn	Arg	His	Val	Pro	Cys
1025					1030					1035					1040
Pro	Ala	Thr	Trp	Ala	Val	Gly	Asn	Trp	Ser	Gln	Cys	Ser	Val	Thr	Cys
				1045					1050						1055
Gly	Glu	Gly	Thr	Gln	Arg	Arg	Asn	Val	Leu	Cys	Thr	Asn	Asp	Thr	Gly



1060	1065	1070
Val Pro Cys Asp Glu Ala Gln Gln Pro Ala Ser Glu Val Thr Cys Ser		
1075	1080	1085
Leu Pro Leu Cys Arg Trp Pro Leu Gly Thr Leu Gly Pro Glu Gly Ser		
1090	1095	1100
Gly Ser Gly Ser Ser Ser His Glu Leu Phe Asn Glu Ala Asp Phe Ile		
1105	1110	1115
Pro His His Leu Ala Pro Arg Pro Ser Pro Ala Ser Ser Pro Lys Pro		
1125	1130	1135
Gly Thr Met Gly Asn Ala Ile Glu Glu Glu Ala Pro Glu Leu Asp Leu		
1140	1145	1150
Pro Gly Pro Val Phe Val Asp Asp Phe Tyr Tyr Asp Tyr Asn Phe Ile		
1155	1160	1165
Asn Phe His Glu Asp Leu Ser Tyr Gly Pro Ser Glu Glu Pro Asp Leu		
1170	1175	1180
Asp Leu Ala Gly Thr Gly Asp Arg Thr Pro Pro Pro His Ser His Pro		
1185	1190	1195
Ala Ala Pro Ser Thr Gly Ser Pro Val Pro Ala Thr Glu Pro Pro Ala		
1205	1210	1215
Ala Lys Glu Glu Gly Val Leu Gly Pro Trp Ser Pro Ser Pro Trp Pro		
1220	1225	1230
Ser Gln Ala Gly Arg Ser Pro Pro Pro Ser Glu Gln Thr Pro Gly		
1235	1240	1245
Asn Pro Leu Ile Asn Phe Leu Pro Glu Glu Asp Thr Pro Ile Gly Ala		
1250	1255	1260
Pro Asp Leu Gly Leu Pro Ser Leu Ser Trp Pro Arg Val Ser Thr Asp		
1265	1270	1275
Gly Leu Gln Thr Pro Ala Thr Pro Glu Ser Gln Asn Asp Phe Pro Val		
1285	1290	1295
Gly Lys Asp Ser Gln Ser Gln Leu Pro Pro Pro Trp Arg Asp Arg Thr		
1300	1305	1310
Asn Glu Val Phe Lys Asp Asp Glu Glu Pro Lys Gly Arg Gly Ala Pro		
1315	1320	1325
His Leu Pro Pro Arg Pro Ser Ser Thr Leu Pro Pro Leu Ser Pro Val		
1330	1335	1340
Gly Ser Thr His Ser Ser Pro Ser Pro Asp Val Ala Glu Leu Trp Thr		
1345	1350	1355
Gly Gly Thr Val Ala Trp Glu Pro Ala Leu Glu Gly Gly Leu Gly Pro		
1365	1370	1375
Val Asp Ser Glu Leu Trp Pro Thr Val Gly Val Ala Ser Leu Leu Pro		
1380	1385	1390
Pro Pro Ile Ala Pro Leu Pro Glu Met Lys Val Arg Asp Ser Ser Leu		
1395	1400	1405
Glu Pro Gly Thr Pro Ser Phe Pro Ala Pro Gly Pro Gly Ser Trp Asp		
1410	1415	1420
Leu Gln Thr Val Ala Val Trp Gly Thr Phe Leu Pro Thr Thr Leu Thr		
1425	1430	1435
Gly Leu Gly His Met Pro Glu Pro Ala Leu Asn Pro Gly Pro Lys Gly		
1445	1450	1455
Gln Pro Glu Ser Leu Ser Pro Glu Val Pro Leu Ser Ser Arg Leu Leu		
1460	1465	1470
Ser Thr Pro Ala Trp Asp Ser Pro Ala Asn Ser His Arg Val Pro Glu		
1475	1480	1485
Thr Gln Pro Leu Ala Pro Ser Leu Ala Glu Ala Gly Pro Pro Ala Asp		

1490                      1495                      1500  
 Pro Leu Val Val Arg Asn Ala Ser Trp Gln Ala Gly Asn Trp Ser Glu  
 1505                      1510                      1515                      1520  
 Cys Ser Thr Thr Cys Gly Leu Gly Ala Val Trp Arg Pro Val Arg Cys  
                          1525                      1530                      1535  
 Ser Ser Gly Arg Asp Glu Asp Cys Ala Pro Ala Gly Arg Pro Gln Pro  
                          1540                      1545                      1550  
 Ala Arg Arg Cys His Leu Arg Pro Cys Ala Thr Trp His Ser Gly Asn  
                          1555                      1560                      1565  
 Trp Ser Lys Cys Ser Arg Ser Cys Gly Gly Gly Ser Ser Val Arg Asp  
                          1570                      1575                      1580  
 Val Gln Cys Val Asp Thr Arg Asp Leu Arg Pro Leu Arg Pro Phe His  
 1585                      1590                      1595                      1600  
 Cys Gln Pro Gly Pro Ala Lys Pro Pro Ala His Arg Pro Cys Gly Ala  
                          1605                      1610                      1615  
 Gln Pro Cys Leu Ser Trp Tyr Thr Ser Ser Trp Arg Glu Cys Ser Glu  
                          1620                      1625                      1630  
 Ala Cys Gly Gly Gly Glu Gln Gln Arg Leu Val Thr Cys Pro Glu Pro  
                          1635                      1640                      1645  
 Gly Leu Cys Glu Glu Ala Leu Arg Pro Asn Thr Thr Arg Pro Cys Asn  
                          1650                      1655                      1660  
 Thr His Pro Cys Thr Gln Trp Val Val Gly Pro Trp Gly Gln Cys Ser  
 1665                      1670                      1675                      1680  
 Ala Pro Cys Gly Gly Gly Val Gln Arg Arg Leu Val Lys Cys Val Asn  
                          1685                      1690                      1695  
 Thr Gln Thr Gly Leu Pro Glu Glu Asp Ser Asp Gln Cys Gly His Glu  
                          1700                      1705                      1710  
 Ala Trp Pro Glu Ser Ser Arg Pro Cys Gly Thr Glu Asp Cys Glu Pro  
                          1715                      1720                      1725  
 Val Glu Pro Pro Arg Cys Glu Arg Asp Arg Leu Ser Phe Gly Phe Cys  
                          1730                      1735                      1740  
 Glu Thr Leu Arg Leu Leu Gly Arg Cys Gln Leu Pro Thr Ile Arg Thr  
 1745                      1750                      1755                      1760  
 Gln Cys Cys Arg Ser Cys Ser Pro Pro Ser His Gly Ala Pro Ser Arg  
                          1765                      1770                      1775  
 Gly His Gln Arg Val Ala Arg Arg  
                          1780

&lt;210&gt; 2287

&lt;211&gt; 750

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2287

tgacacaggt tattctctctt tgggttaaata tcttacaagt ctttttttaa tcttcacttc  
 60  
 tggcctataa aagtatcatc atccccattt tacagaatgg gaaagtaagg cgtggggagg  
 120  
 ttgaggacat ttgtacagag tcaggtaact ggaggaactg gactacaacc ctgctcagtg  
 180  
 cagccagtgt gactgagcgc ctctgagag ccaggtggat tctgcctca aggatccatg  
 240  
 ctctgggcaa gaaaccacc catcagcagg tggcttctgc tgagccacaa caggcacaca  
 300

gaggggtcca tgggagccca gaggggagca tctgaccagg ctcaggggaa ggaatgtgtc  
 360  
 cagcagagtc acagaggagc agtatgagtt agccaggtag gggacattcc aggcagggga  
 420  
 gcagcaggac aaaagcatag aggtagcact gccagtgccca agttccaaaa taagaggctg  
 480  
 actgctacag ggtccatata ggaaaataat gggaaataca tttggacagg aggtggggtc  
 540  
 tgtaacaaag gactttaatt ccagggttaag gaatctggat gttaaaacaa cattagctgc  
 600  
 cattttctaca gtgtacttcc ccaggctctg tgcctttctg ggagccttga aggtttgtga  
 660  
 gctggaagga gatattagga acaaaacgat gcatgaggat agctcaggta aaggttattg  
 720  
 ataagtaaga atgcctggca ccaaacgcgt  
 750

<210> 2288

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2288

Met	Ala	Ala	Asn	Val	Val	Leu	Thr	Ser	Arg	Phe	Leu	Asn	Leu	Glu	Leu
1			5						10					15	
Lys	Ser	Phe	Val	Thr	Asp	Pro	Thr	Ser	Cys	Pro	Asn	Val	Phe	Pro	Ile
			20						25				30		
Ile	Phe	Leu	Tyr	Gly	Pro	Cys	Ser	Ser	Gln	Pro	Leu	Ile	Leu	Glu	Leu
		35					40					45			
Gly	Thr	Gly	Ser	Ala	Thr	Ser	Met	Leu	Leu	Ser	Cys	Cys	Ser	Pro	Ala
		50				55					60				
Trp	Asn	Val	Pro	Tyr	Leu	Ala	Asn	Ser	Tyr	Cys	Ser	Ser	Val	Thr	Leu
65					70					75				80	
Leu	Asp	Thr	Phe	Leu	Pro	Leu	Ser	Leu	Val	Arg	Cys	Ser	Pro	Leu	Gly
			85						90					95	
Ser	His	Gly	Pro	Leu	Cys	Val	Pro	Val	Val	Ala	Gln	Gln	Lys	Pro	Pro
			100						105				110		
Ala	Asp	Gly	Trp	Val	Ser	Cys	Pro	Glu	His	Gly	Ser	Leu	Arg	Ala	Glu
		115					120						125		
Ser	Thr	Trp	Leu	Ser	Gly	Gly	Ala	Gln	Ser	His	Trp	Leu	His		
		130				135						140			

<210> 2289

<211> 381

<212> DNA

<213> Homo sapiens

<400> 2289

caggacgcgg cctcggcggg gcccgggccg aacggctgcg gacacctggg cgccgaggag  
 60  
 ccgagcgccg ccgcctccgg catggatcat tgcgtgacgg tggagcgca gctggagaag  
 120  
 gtgctgcaca agttctcggg ctacgggcag ctgtgcgagc gcggcctgga ggagctcatc  
 180

gactacaccg gcggtctcaa gcaccagatc ctgcagagcc acggccaaga tgctgaatta  
 240  
 tcagggacac ttctacttgt ttgacacag ggctgtaaaa gaataanaag gggatactgg  
 300  
 ttcaaaaatt ggcctccgac cacaagaca tccacagcag tggtttctcg gttggaaaag  
 360  
 ccattgatga ggattcactt t  
 381

<210> 2290

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2290

Met	Asp	His	Cys	Val	Thr	Val	Glu	Arg	Glu	Leu	Glu	Lys	Val	Leu	His
1				5					10					15	
Lys	Phe	Ser	Gly	Tyr	Gly	Gln	Leu	Cys	Glu	Arg	Gly	Leu	Glu	Glu	Leu
		20					25					30			
Ile	Asp	Tyr	Thr	Gly	Gly	Leu	Lys	His	Gln	Ile	Leu	Gln	Ser	His	Gly
	35					40					45				
Gln	Asp	Ala	Glu	Leu	Ser	Gly	Thr	Leu	Ser	Leu	Val	Leu	Thr	Gln	Gly
	50					55				60					
Cys	Lys	Arg	Ile	Xaa	Arg	Gly	Tyr	Trp	Phe	Lys	Asn	Trp	Pro	Pro	Thr
65				70					75					80	
Thr	Lys	Thr	Ser	Thr	Ala	Val	Phe	Leu	Gly	Leu	Glu	Lys	Pro	Leu	Met
			85					90						95	
Arg	Ile	His	Phe												
			100												

<210> 2291

<211> 573

<212> DNA

<213> Homo sapiens

<400> 2291

gcattgctcta ccgcaaagtc ggggtccccac cgattaaaaa tgcccggggtc gaggacagcc  
 60  
 ttccggcagca ccgactcatt atcggcaccg acctagtcaa ttgccaccac ctgettattgc  
 120  
 aagtgggtcga tagaagcccc agccggctta agccagtctt ggaaaaccac cacatatcgc  
 180  
 acatgttcgt tgtgacgatg cagctgagcc attgaatcga cggtcagcgc catgaacgcc  
 240  
 cgatgctcgt tgacggtaag actcggcgac ccagcaacgt cggcggttgt cgtgccctca  
 300  
 tcggtgtaat ggcgacgagc gacgatgacg tcatgtccgc cggcaaagaa ggctgcggaa  
 360  
 gcctcgcgta attcttgggg accgaggtcc tcggcgcgcc ggtctgaccc caccgccttg  
 420  
 aacttggcgt taaggaccga cctcacgtga gcctcccctg acgggttaga caggtattcc  
 480  
 tcctgccagt cccgcgctgc ccgaggcaag ctcaccccc agttgagctg ccaataccgc  
 540

cacgacagga tctcgaaaag attggggacg cgt  
573

<210> 2292

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2292

```
Met Ser Leu Pro Arg Ala Ala Arg Asp Trp Gln Glu Glu Tyr Leu Ser
  1           5           10           15
Asn Pro Ser Gly Glu Ala His Val Arg Ser Val Leu Asn Ala Lys Phe
      20           25           30
Lys Ala Val Gly Ser Asp Arg Arg Ala Glu Asp Leu Gly Pro Gln Glu
      35           40           45
Leu Arg Glu Ala Ser Ala Ala Phe Phe Ala Gly Gly His Asp Val Ile
      50           55           60
Val Ala Arg Arg His Tyr Thr Asp Glu Gly Thr Thr Thr Ala Asp Val
      65           70           75           80
Ala Gly Ser Ala Ser Leu Thr Val Asn Glu His Arg Ala Phe Met Ala
      85           90           95
Leu Thr Val Asp Ser Met Ala Gln Leu His Arg His Asn Glu His Val
      100          105          110
Arg Tyr Val Val Val Phe Gln Asn Trp Leu Lys Pro Ala Gly Ala Ser
      115          120          125
Ile Asp His Leu His Lys Gln Val Val Ala Ile Asp
      130          135          140
```

<210> 2293

<211> 358

<212> DNA

<213> Homo sapiens

<400> 2293

```
acgcgtgaag gaatggaagc tgctctcgtc ggtgcacaca agactggcgg gtgcccattg
  60
gtgaacactg tcgctaagaa ctggttgaac cggctcaaca cgccggatat gaaaccact
  120
gaggagatca agcggcagtt ccaaggtctg cattggttgg gacgtaagta tggggtcaac
  180
cacggagagt tctatcttga cgacgagcag tgggccacgc tcatggccgg gtcctctttc
  240
gaggcgaatc cgcgcattaa gagcaacttt gattccgagg gcgctggtgt ggatccggat
  300
tccgattcac ttgctggggc tgatcgagat gcccagagtg cttcggatgc atgccttc
  358
```

<210> 2294

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2294

```
Met Glu Ala Ala Leu Val Gly Ala His Lys Thr Gly Gly Cys Pro Leu
```

```

      1             5             10             15
Val Asn Thr Val Ala Lys Asn Trp Leu Asn Arg Leu Asn Thr Pro Asp
      20             25             30
Met Lys Pro Thr Glu Glu Ile Lys Arg Gln Phe Gln Gly Leu His Trp
      35             40             45
Leu Gly Arg Lys Tyr Gly Leu Asn His Gly Glu Phe Tyr Leu Asp Asp
      50             55             60
Glu Gln Trp Ala Thr Leu Met Ala Gly Ser Ser Phe Glu Ala Asn Pro
      65             70             75             80
Arg Ile Lys Ser Asn Phe Asp Ser Glu Gly Ala Val Val Asp Pro Asp
      85             90             95
Ser Asp Ser Leu Ala Gly Ala Asp Arg Asp Ala Arg Gly Ala Ser Asp
      100            105            110
Ala Cys Leu
      115

```

<210> 2295  
 <211> 546  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2295
ggcaccgatc cgagtgggtg tgccgggatt aggnccggatc tanaaacatt ctccgccctt
60
ggggcggtatg gctgctcggt cattaccgca ctggtagcgc aaaatacgcg cggcgtgcag
120
tcggtgtatc gtatcgaacc ggattttgtc ggtgcacaac tggactctgt gttcagcgat
180
gtccgcattg attccaccaa aatcggcatg ctggcagagg cggatatcgt ggaagcggtc
240
gcgagcgcc tcaaacatta tcgcgttaaa aacgtggtac ttgatacggg gatgctggcg
300
aaaagtggcg atccgctgct atctcctgct gctgtcgaaa ctctgcgaaa acaccttctg
360
ccacacgtcg cgctgatcac gccaaatttg ccggaggcgg cggcgctgct ggatgcgcct
420
catgcccgta ccgagcacga gatgaaagag caggggcgcg cacttctggc gcttggtctg
480
gaggcagtgc tgatgaaagg cggccatctt gacgatcctg agagcccgga ctggctcttc
540
acgcgt
546

```

<210> 2296  
 <211> 182  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2296
Gly Thr Asp Pro Ser Gly Gly Ala Gly Ile Arg Xaa Asp Leu Xaa Thr
1             5             10             15
Phe Ser Ala Leu Gly Ala Tyr Gly Cys Ser Val Ile Thr Ala Leu Val
20             25             30
Ala Gln Asn Thr Arg Gly Val Gln Ser Val Tyr Arg Ile Glu Pro Asp

```

```

      35          40          45
Phe Val Gly Ala Gln Leu Asp Ser Val Phe Ser Asp Val Arg Ile Asp
  50          55          60
Ser Thr Lys Ile Gly Met Leu Ala Glu Ala Asp Ile Val Glu Ala Val
  65          70          75          80
Ala Glu Arg Leu Lys His Tyr Arg Val Lys Asn Val Val Leu Asp Thr
      85          90          95
Val Met Leu Ala Lys Ser Gly Asp Pro Leu Leu Ser Pro Ala Ala Val
      100          105          110
Glu Thr Leu Arg Lys His Leu Leu Pro His Val Ala Leu Ile Thr Pro
      115          120          125
Asn Leu Pro Glu Ala Ala Ala Leu Leu Asp Ala Pro His Ala Arg Thr
      130          135          140
Glu His Glu Met Lys Glu Gln Gly Arg Ala Leu Leu Ala Leu Gly Cys
      145          150          155          160
Glu Ala Val Leu Met Lys Gly Gly His Leu Asp Asp Pro Glu Ser Pro
      165          170          175
Asp Trp Leu Phe Thr Arg
      180

```

&lt;210&gt; 2297

&lt;211&gt; 414

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2297

```

gggaattccg ggcccttccc cccaagcccg ggtaattttt tgtattttta aaaaaaagg
  60
gaattttccc acgttggggg ggggggggttc ggactttttc ccccaaaaac ccccccccc
  120
ccccccccca aaggccgaaa agcagggcca aaaccccccg gacccccccc ggggggggca
  180
aaaggaaaaa cccctttttt tttttttttt ttttatacac atgaggggtct ctgggttaata
  240
aatgttgaga tgtaggggta ggtgagatta aacaggttct ttttttcatg atttctcgga
  300
gtctttatga tgctccacac cagtacttct caaagctgac tgtgtataca aaacactggg
  360
gatctgacct acatgtaaag tetgatttct ttggtctggg gcaggcctga aatn
  414

```

&lt;210&gt; 2298

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2298

```

Lys Lys Arg Glu Phe Ser His Val Gly Gly Gly Gly Phe Gly Leu Phe
  1          5          10          15
Pro Pro Lys Thr Pro Pro Pro His Pro Pro Lys Gly Arg Lys Ala Gly
      20          25          30
Pro Lys Pro Pro Gly Pro Pro Pro Gly Gly Ala Lys Gly Lys Thr Pro
      35          40          45
Phe Phe Phe Phe Phe Phe Tyr Thr His Glu Gly Leu Trp Leu Ile Asn

```

50  
Val Glu Met  
65

55

60

<210> 2299  
<211> 987  
<212> DNA  
<213> Homo sapiens

<400> 2299  
ngagatgtct aagttatttt ttttttcccg gaaggcaaat ggctggcgtg gaagcacaac  
60  
ccgctttcac tcttcgaatt tgtgcttagc tcttttcttg taccctgcga ctctgacca  
120  
acatgctgtg atgtgtgccg agggaggaat tggtcagcta cacaacctgg atcttaccac  
180  
agtttgata tgactgaggc tctccaatgg gccagatata actggcgacg gctgatcaga  
240  
ggtgcaacca gggatgatga ttcagggcca tacaactatt cctcgttgct cgctgtggg  
300  
cgcaagtcct ctcagatccc taaactgtca ggaaggcacc ggattgttgt tccccacatc  
360  
cagcccttca aggatgagta tgagaagttc tccggagcct atgtgaacaa tcgaatacga  
420  
acaacaaagt acacacttct gaattttgtg ccaagaaatt tatttgaaca atttcacaga  
480  
gctgccatt tataatttct gttcctagtt gtcctgaact gggtagcttt ggtagaagcc  
540  
ttccaaaagg aaatcaccat gttgcctctg gtgggtggcc ttacaattat cgcaattaaa  
600  
gatggcctgg aagattatcg gaaatacaaa attgacaaac agatcaataa ttttaataact  
660  
aaagtattata gtaggaaaga gaaaaaatac attgaccgat gctggaaaga cgttactgtt  
720  
ggggacttta ttgcctctc ctgcaacgag gtcacccctg cagacatggt actactcttt  
780  
tccactgac cagatggaat ctgtcacatt gagacttctg gtcttgatgg agagagcaat  
840  
ttaaaacaga ggcaggtggt tcggggatat gcagaacagg actctgaagt tgatcctgag  
900  
aagttttcca gtaggataga atgtgaaagc ccaaacaatg acctcagcag attccgaggc  
960  
ttcctagaac attccaacaa agaacgc  
987

<210> 2300  
<211> 266  
<212> PRT  
<213> Homo sapiens

<400> 2300  
Met Thr Glu Ala Leu Gln Trp Ala Arg Tyr His Trp Arg Arg Leu Ile  
1 5 10 15  
Arg Gly Ala Thr Arg Asp Asp Asp Ser Gly Pro Tyr Asn Tyr Ser Ser



```

      20      25      30
Leu Leu Ala Cys Gly Arg Lys Ser Ser Gln Ile Pro Lys Leu Ser Gly
      35      40      45
Arg His Arg Ile Val Val Pro His Ile Gln Pro Phe Lys Asp Glu Tyr
      50      55      60
Glu Lys Phe Ser Gly Ala Tyr Val Asn Asn Arg Ile Arg Thr Thr Lys
65      70      75      80
Tyr Thr Leu Leu Asn Phe Val Pro Arg Asn Leu Phe Glu Gln Phe His
      85      90      95
Arg Ala Ala Asn Leu Tyr Phe Leu Phe Leu Val Val Leu Asn Trp Val
      100      105      110
Pro Leu Val Glu Ala Phe Gln Lys Glu Ile Thr Met Leu Pro Leu Val
      115      120      125
Val Val Leu Thr Ile Ile Ala Ile Lys Asp Gly Leu Glu Asp Tyr Arg
      130      135      140
Lys Tyr Lys Ile Asp Lys Gln Ile Asn Asn Leu Ile Thr Lys Val Tyr
145      150      155      160
Ser Arg Lys Glu Lys Lys Tyr Ile Asp Arg Cys Trp Lys Asp Val Thr
      165      170      175
Val Gly Asp Phe Ile Arg Leu Ser Cys Asn Glu Val Ile Pro Ala Asp
      180      185      190
Met Val Leu Leu Phe Ser Thr Asp Pro Asp Gly Ile Cys His Ile Glu
      195      200      205
Thr Ser Gly Leu Asp Gly Glu Ser Asn Leu Lys Gln Arg Gln Val Val
      210      215      220
Arg Gly Tyr Ala Glu Gln Asp Ser Glu Val Asp Pro Glu Lys Phe Ser
225      230      235      240
Ser Arg Ile Glu Cys Glu Ser Pro Asn Asn Asp Leu Ser Arg Phe Arg
      245      250      255
Gly Phe Leu Glu His Ser Asn Lys Glu Arg
      260      265

```

&lt;210&gt; 2301

&lt;211&gt; 390

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2301

tatcccaagc gcttcaaatt tgatgccgat gagttctact tgaatcgtc cgaggaaatg

60

nncgccacct cttccgcgna tttccctgaa gcctgcgata acactatgga aatcgctgag

120

nncgttgcca cgttgaattc aacacaaacg caanactaca tgcccgattt ccccaccccg

180

gagggggaga atgaggaatc ctggttcgtc aaagaagttg aacgcggttt gcactaccga

240

ttccccgagg gcattcccga tgacgtacgc aagcaggcag attatgaagt agggattatt

300

accagatgg gattccccgg ctacttcttg gtggtcgcgg attttatcaa ctgggcgaag

360

aataacggaa ttcgagtggg ccccgggcgt

390

&lt;210&gt; 2302

<211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 2302  
 Tyr Pro Lys Arg Phe Lys Phe Asp Ala Asp Glu Phe Tyr Leu Lys Ser  
 1 5 10 15  
 Ser Glu Glu Met Xaa Ala Thr Ser Ser Ala Xaa Phe Pro Glu Ala Cys  
 20 25 30  
 Asp Asn Thr Met Glu Ile Ala Glu Xaa Val Ala Thr Leu Asn Ser Thr  
 35 40 45  
 Gln Thr Gln Xaa Tyr Met Pro Asp Phe Pro Thr Pro Glu Gly Glu Asn  
 50 55 60  
 Glu Glu Ser Trp Phe Val Lys Glu Val Glu Arg Gly Leu His Tyr Arg  
 65 70 75 80  
 Phe Pro Glu Gly Ile Pro Asp Asp Val Arg Lys Gln Ala Asp Tyr Glu  
 85 90 95  
 Val Gly Ile Ile Thr Gln Met Gly Phe Pro Gly Tyr Phe Leu Val Val  
 100 105 110  
 Ala Asp Phe Ile Asn Trp Ala Lys Asn Asn Gly Ile Arg Val Gly Pro  
 115 120 125  
 Gly Arg  
 130

<210> 2303  
 <211> 638  
 <212> DNA  
 <213> Homo sapiens

<400> 2303  
 nnggatccag gctgcccctg tgtgtctcct tcagtcttcg ttagctgect gctgctgtct  
 60  
 gcacctgtgt ttggtacct gggcgaccga catagccgca aggctaccat gagcttcggt  
 120  
 atcttgctgt ggtcaggagc tggcctctct agctccttca tctccccccg gtattcttgg  
 180  
 ctcttcttcc tgtcccgagg catcgagggc actggctcgg ccagctactc caccatcgcg  
 240  
 cccaccgtcc tgggcgacct cttcgtgagg gaccagcgca cccgcgtgct ggctgtcttc  
 300  
 tacatcttta tccccgttgg aagtggctctg ggctacgtgc tggggtcggc tgtgacgatg  
 360  
 ctgactggga actggcgctg ggccctccga gtcatgccct gcctggaggc cgtggccttg  
 420  
 atcctgctta tcctgctggt tccagacca ccccggggag ctgccgagac acagggggag  
 480  
 ggggccgtgg gaggcttcag aagcagctgg tgtgaggacg tcagatacct ggggaaaaac  
 540  
 tggagttttg tgtggtcgac ctcgggagtg accgccatgg cctttgtgac tggagccctg  
 600  
 ggggttctggg cccccaagtt tctgctcgag gcacgcgt  
 638

<210> 2304

<211> 212  
 <212> PRT  
 <213> Homo sapiens

<400> 2304  
 Xaa Asp Pro Gly Cys Pro Cys Val Ser Pro Ser Val Phe Val Ser Cys  
 1 5 10 15  
 Leu Leu Leu Ser Ala Pro Val Phe Gly Tyr Leu Gly Asp Arg His Ser  
 20 25 30  
 Arg Lys Ala Thr Met Ser Phe Gly Ile Leu Leu Trp Ser Gly Ala Gly  
 35 40 45  
 Leu Ser Ser Ser Phe Ile Ser Pro Arg Tyr Ser Trp Leu Phe Phe Leu  
 50 55 60  
 Ser Arg Gly Ile Glu Gly Thr Gly Ser Ala Ser Tyr Ser Thr Ile Ala  
 65 70 75 80  
 Pro Thr Val Leu Gly Asp Leu Phe Val Arg Asp Gln Arg Thr Arg Val  
 85 90 95  
 Leu Ala Val Phe Tyr Ile Phe Ile Pro Val Gly Ser Gly Leu Gly Tyr  
 100 105 110  
 Val Leu Gly Ser Ala Val Thr Met Leu Thr Gly Asn Trp Arg Trp Ala  
 115 120 125  
 Leu Arg Val Met Pro Cys Leu Glu Ala Val Ala Leu Ile Leu Leu Ile  
 130 135 140  
 Leu Leu Val Pro Asp Pro Pro Arg Gly Ala Ala Glu Thr Gln Gly Glu  
 145 150 155 160  
 Gly Ala Val Gly Gly Phe Arg Ser Ser Trp Cys Glu Asp Val Arg Tyr  
 165 170 175  
 Leu Gly Lys Asn Trp Ser Phe Val Trp Ser Thr Leu Gly Val Thr Ala  
 180 185 190  
 Met Ala Phe Val Thr Gly Ala Leu Gly Phe Trp Ala Pro Lys Phe Leu  
 195 200 205  
 Leu Glu Ala Arg  
 210

<210> 2305  
 <211> 340  
 <212> DNA  
 <213> Homo sapiens

<400> 2305  
 gccccgcct ctatcttccg gcacgtcac agtcgcatcg tgacgggtact ggctggagtc  
 60  
 tcggaccagc acactttgac cgctcgtggc gcctcgtgac atggggtaac gcgaacctcg  
 120  
 tcgctcctgt tcttgacctc ttccgtgccc ccattgacaa cgatcgggca agttcactgg  
 180  
 cccgcaacgc tattggtgac gcagcactcg cagctggtct cgaccgactc gtccacacca  
 240  
 cggcgtcggc gcgcgacgag ggcgatgagt tggcgtcgt tactcgagc gctgctgccg  
 300  
 ccgcacgcaa ttccatgacg acaacgtgga gttggcgcgc  
 340

<210> 2306

<211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 2306  
 Met Glu Leu Arg Ala Ala Ala Ala Leu Arg Val Thr Thr Thr Asn  
 1 5 10 15  
 Ser Ser Pro Ser Ser Arg Thr Asp Ala Val Val Trp Thr Ser Arg Ser  
 20 25 30  
 Arg Pro Ala Ala Ser Ala Ala Ser Pro Ile Ala Leu Arg Ala Ser Glu  
 35 40 45  
 Leu Ala Arg Ser Leu Ser Met Gly Ala Arg Lys Arg Ser Arg Thr Gly  
 50 55 60  
 Ala Thr Arg Phe Ala Leu Pro His Val Thr Arg Arg Pro Arg Arg Ser  
 65 70 75 80  
 Lys Cys Ala Gly Pro Arg Leu Gln Pro Val Pro Ser Arg Cys Asp Cys  
 85 90 95  
 Asp Asp Ala Gly Arg  
 100

<210> 2307  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens

<400> 2307  
 ngcttctcag ctgaaggggg agataaagct ctacataaga tgggtccagg tgggggcaaa  
 60  
 gccaaaggcac tgggtggggc tggcagtggg agcaagggct cagcaggtgg cggaagcaag  
 120  
 cgacggctga gcagcgaaga cagctccctg gagccagacc tggccgagat gagcctggat  
 180  
 gacagcagcc tggccctggg cgcagaggcc aggaccttcg ggggattccc tgagagccct  
 240  
 ccaccctgtc ctctccacgg tggctcccga ggcccttcca ctttccttcc tgagccccc  
 300  
 gatacttatg aagaagatgg tgatgagagt ggcaatgggc ttcccaaaac caaagaggca  
 360

<210> 2308  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 2308  
 Xaa Phe Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro  
 1 5 10 15  
 Gly Gly Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys  
 20 25 30  
 Gly Ser Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser  
 35 40 45  
 Ser Leu Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu  
 50 55 60  
 Ala Leu Gly Ala Glu Ala Arg Thr Phe Gly Gly Phe Pro Glu Ser Pro



<400> 2311  
 gtgcacgccg agatgctgcc gcaagacaag cagcgtgtcg tcggcgagtt gaagcgccag  
 60  
 ggctttctcag tgatcaaggt cggcgatggc atcaatgatt gcgacgtctt cgccgcggcg  
 120  
 gatgtcggca gtcccatggg cggcagcgcg gacgtggctc tcgaaacggc cgatgctgcc  
 180  
 gtccttcacg gacgggtggg ggacgtcttc gcgatgatcg ccctatcgaa gcgaaccatg  
 240  
 gccaacattc gacagaacat cgcgatcgcg atcgggctaa aggcggtggt ccttgtaacg  
 300  
 accgtcgtcg gcatcacggg gctttggcct gcaatcctcg ccgatacggg gaccacggag  
 360  
 cttgtgacca tgaacgcg  
 378

<210> 2312  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 2312  
 Val His Ala Glu Met Leu Pro Gln Asp Lys Gln Arg Val Val Gly Glu  
 1 5 10 15  
 Leu Lys Arg Gln Gly Phe Ser Val Ile Lys Val Gly Asp Gly Ile Asn  
 20 25 30  
 Asp Cys Asp Ala Leu Ala Ala Ala Asp Val Gly Ser Pro Met Gly Gly  
 35 40 45  
 Ser Ala Asp Val Ala Leu Glu Thr Ala Asp Ala Ala Val Leu His Gly  
 50 55 60  
 Arg Val Gly Asp Val Phe Ala Met Ile Ala Leu Ser Lys Arg Thr Met  
 65 70 75 80  
 Ala Asn Ile Arg Gln Asn Ile Ala Ile Ala Ile Gly Leu Lys Ala Val  
 85 90 95  
 Phe Leu Val Thr Thr Val Val Gly Ile Thr Gly Leu Trp Pro Ala Ile  
 100 105 110  
 Leu Ala Asp Thr Gly Thr Thr Glu Leu Val Thr Met Asn Ala  
 115 120 125

<210> 2313  
 <211> 669  
 <212> DNA  
 <213> Homo sapiens

<400> 2313  
 ctagtggcat ggtctcgtcg gtcttttagtg gagcataccg acacatcggt gactcaaacg  
 60  
 atccgaatca tggctcgtcc tggttggcct ggaaccatta acgtacgcct caccatcgc  
 120  
 ctaagcgacg ccggtctagc tgtcgaagtc accgcgcgca atgtcggtag gacagcgggg  
 180  
 ccgcttgat acgcagcaca cccctatctc tgtctgggtg gcaccatcga cgactggaca  
 240

gtcgacgccc cgtttacctc gtggttacag gtcgatgac ggctgctacc aatgcagatg  
 300  
 cgcgagatgg acagcatcca cgcgctgaac ggtctcacgg gcggacagcg caccttcgat  
 360  
 accgcttaca ccgtgaaagg aggacggaac cgtcggatcg cccgcatggc gtatccgggt  
 420  
 ctcaacggtg aaacgagcca cgaattgtgg ggcgacgccg cgatgagctg ggtgcaagtc  
 480  
 tacactccag acgaccgcca cagtctggcc atcgagccaa tgacctgcgg cccagatgca  
 540  
 tttaatgagg gcccagacca cggtgacgtc attcgactgg agcccggtaa tgacgtcaca  
 600  
 ctgcactggg gcacgccta acccgcgga gctcgaaagg acaaggacgg gaaggcagga  
 660  
 ttcacgcgt  
 669

&lt;210&gt; 2314

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2314

Leu	Val	Ala	Trp	Ser	Arg	Trp	Ser	Leu	Val	Glu	His	Thr	Asp	Thr	Ser
1				5					10					15	
Val	Thr	Gln	Thr	Ile	Arg	Ile	Met	Ala	Arg	Pro	Gly	Trp	Pro	Gly	Thr
		20					25						30		
Ile	Asn	Val	Arg	Leu	Thr	His	Arg	Leu	Ser	Asp	Ala	Gly	Leu	Ala	Val
	35					40						45			
Glu	Val	Thr	Ala	Arg	Asn	Val	Gly	Thr	Thr	Ala	Gly	Pro	Leu	Gly	Tyr
	50				55					60					
Ala	Ala	His	Pro	Tyr	Leu	Cys	Leu	Gly	Gly	Thr	Ile	Asp	Asp	Trp	Thr
65				70				75						80	
Val	Asp	Ala	Pro	Phe	Thr	Ser	Trp	Leu	Gln	Val	Asp	Asp	Arg	Leu	Leu
			85					90						95	
Pro	Met	Gln	Met	Arg	Glu	Met	Asp	Ser	Ile	His	Ala	Leu	Asn	Gly	Leu
		100					105						110		
Thr	Gly	Gly	Gln	Arg	Thr	Phe	Asp	Thr	Ala	Tyr	Thr	Val	Lys	Gly	Gly
	115					120						125			
Arg	Asn	Arg	Arg	Ile	Ala	Arg	Met	Ala	Tyr	Pro	Gly	Leu	Asn	Gly	Glu
	130				135						140				
Thr	Ser	His	Glu	Leu	Trp	Gly	Asp	Ala	Ala	Met	Ser	Trp	Val	Gln	Val
145				150				155						160	
Tyr	Thr	Pro	Asp	Asp	Arg	His	Ser	Leu	Ala	Ile	Glu	Pro	Met	Thr	Cys
			165					170						175	
Gly	Pro	Asp	Ala	Phe	Asn	Glu	Gly	Pro	Thr	His	Gly	Asp	Val	Ile	Arg
		180					185						190		
Leu	Glu	Pro	Gly	Asn	Asp	Val	Thr	Leu	His	Trp	Gly	Ile	Ala		
	195					200						205			

&lt;210&gt; 2315

&lt;211&gt; 546

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 2315  
 nacgcgtccc tcacgatac cgagcccgagg atgggaaaac ggggtgatcg cgttgaggcc  
 60  
 acccaaggcc gaccaattcg catcgataag gcggctcgtt atcacacttc tcgcggcgtg  
 120  
 ccggtagatg aactgtttga ccgagtgcgc cgcagcttag accgagtgcg tgaacagggg  
 180  
 cacaacgtct actacgacga acagcgtgca tggcttgacg attactgggc aacggctgat  
 240  
 gttgaggtcg aggggtgcccc gaccgggtatt cagcaggctg tcaggtggaa ccttttccag  
 300  
 attgctcagg catcagcccg tgcagatcaa cttggcattc cggcaaaggg tgtaaccggg  
 360  
 tcaggctatg aaggccacta cttttgggac actgaggttt atgtcatccc gatgttgacc  
 420  
 tacactcatc caagaatcgc tgagaatgcg ctgagattcc ggggtgaatac ccttccgcaa  
 480  
 gctcgacgcc gggctaagga attgtctgaa cgaggcgccc ttttcccggt gcgaacaatc  
 540  
 accggt  
 546

<210> 2316  
 <211> 182  
 <212> PRT  
 <213> Homo sapiens

<400> 2316  
 Xaa Ala Ser Leu Ile Asp Thr Glu Pro Gly Met Gly Lys Arg Val Tyr  
 1 5 10 15  
 Arg Val Glu Ala Thr Gln Gly Arg Pro Ile Arg Ile Asp Lys Ala Val  
 20 25 30  
 Ala Tyr His Thr Ser Arg Gly Val Pro Val His Glu Leu Phe Asp Arg  
 35 40 45  
 Val Arg Arg Ser Leu Asp Arg Val Arg Glu Gln Gly His Asn Val Tyr  
 50 55 60  
 Tyr Asp Glu Gln Arg Ala Trp Leu Asp Asp Tyr Trp Ala Thr Ala Asp  
 65 70 75 80  
 Val Glu Val Glu Gly Ala Pro Thr Gly Ile Gln Gln Ala Val Arg Trp  
 85 90 95  
 Asn Leu Phe Gln Ile Ala Gln Ala Ser Ala Arg Ala Asp Gln Leu Gly  
 100 105 110  
 Ile Pro Ala Lys Gly Val Thr Gly Ser Gly Tyr Glu Gly His Tyr Phe  
 115 120 125  
 Trp Asp Thr Glu Val Tyr Val Ile Pro Met Leu Thr Tyr Thr His Pro  
 130 135 140  
 Arg Ile Ala Glu Asn Ala Leu Arg Phe Arg Val Asn Thr Leu Pro Gln  
 145 150 155 160  
 Ala Arg Arg Arg Ala Lys Glu Leu Ser Glu Arg Gly Ala Leu Phe Pro  
 165 170 175  
 Trp Arg Thr Ile Thr Gly  
 180



<210> 2317  
 <211> 496  
 <212> DNA  
 <213> Homo sapiens

<400> 2317  
 gccggcgggc tcggaacgg tcactgacct gcagcaggca atggcggtcg cggtttaatc  
 60  
 agggttctgc acggagtttt ggatagtcg tccagtcgcc actggcaagg cgcgaccagg  
 120  
 cagctgctga cgtgctgtg atgccgagga gatcggagac gattcgtggg tgcattctgcc  
 180  
 gggtcagtgc gatcagcgcg gtcgttcgag cgcttctcga acgcagcccc tgcaggcgca  
 240  
 gacgtcggtc gagggggct ggtgtgagat gcaaccccg attcctgccg ggaaagagcc  
 300  
 atccctcggg tcggtgtctc gatgtgtcag cgagctcggc gatcgcatte ccgaggacct  
 360  
 cgggcagttc gattggctcg gtcctgatgg tgagcttccc cggtcgtgat gtcacgtcga  
 420  
 cctgctcacg ggtgagcgcg acgatgcgag tgaggtggag gccgtagagg agcacgagca  
 480  
 acccagcggc acgcgt  
 496

<210> 2318  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 2318  
 Met Pro Arg Arg Ser Glu Thr Ile Arg Gly Cys Ile Cys Arg Val Ser  
 1 5 10 15  
 Ser Ile Ser Ala Val Val Arg Ala Leu Pro Glu Arg Ser Pro Cys Trp  
 20 25 30  
 Arg Arg Arg Arg Leu Ser Gly Pro Gly Val Arg Cys Asn Pro Gly Phe  
 35 40 45  
 Leu Pro Gly Lys Ser His Pro Ser Gly Arg Cys Leu Asp Val Ser Ala  
 50 55 60  
 Ser Ser Ala Ile Ala Phe Pro Arg Thr Ser Gly Ser Ser Ile Gly Ser  
 65 70 75 80  
 Ala Pro Met Val Ser Phe Pro Gly Arg Asp Val Thr Ser Thr Cys Ser  
 85 90 95  
 Arg Val Ser Ala Thr Met Arg Val Arg Trp Arg Pro  
 100 105

<210> 2319  
 <211> 1748  
 <212> DNA  
 <213> Homo sapiens

<400> 2319  
 ntgatcaagt ctcggtctct ggattatacc ttgttcctc gaacttggat ctttcctgct  
 60

gaatatactc aattccaaaa ttatgtgaaa gaattgaaga aaaaacggaa gcagaaaact  
120  
tttatagtga aaccagctaa tgggtgcaatg ggtcatggga tttctttgat aagaaatggt  
180  
gacaaacttc catctcagga tcatttgatt gttcaagaat acattgaaaa gcctttccta  
240  
atggaaggtt acaagtttga cttacgaatt tatattcttg ttacatcgtg tgatccacta  
300  
aaaaatatttc tctaccatga tgggcttggt cgaatggga cagagaagta cattccacct  
360  
aatgagtcca atttgacceca gttatacatg catctgacaa actactcgt gaacaagcat  
420  
aatgagcatt ttgaacggga tgaaactgag aacaaaggca gcaaacgttc catcaaatgg  
480  
tttacagaat tccttcaagc aaatcaacat gatgttgcta agttttggag tgatatttca  
540  
gaattggtgg taaagacctt gattgtagca gaacctcatg tcctgcatgc ctatcgaatg  
600  
tgtagacctg gtcaacctcc aggaagcgaa agtgtctgct ttgaagtcct gggatttgat  
660  
attttgttgg atagaaaact aaagccatgg cttctggaga ttaaccgagc cccaagcttt  
720  
ggaactgatc agaaaataga ctatgatgta aaaaggggag tgctgctaaa tgcgttgaag  
780  
ctaactaaaca taaggaccag tgacaaaaga agaaacttgg ccaaacaaaa agctgaggct  
840  
caaaggaggc tctatggtca aaattcaatt aaaaggctct taccaggctc ctcagactgg  
900  
gaacagcaga gacaccagtt ggagaggcgg aaagaagagt tgaaagagag actcgtctca  
960  
gtacgaaagc agatctcacg agaagaacat gaaaatcgac atatggggaa ttatagacga  
1020  
atttatcctc ctgaagataa agcattactt gaaaagtatg aaaatttggt agctgttgcc  
1080  
tttcagacct tcctttcagg aagagcagct tcattccagc gagagttgaa taatcctttg  
1140  
aaaaggatga aggaagaaga tattttggat cttctggagc aatgtgaaat tgatgatgaa  
1200  
aagttgatgg gaaaaactac caagactcga ggaccaaagc ctctgtgttc tatgcctgag  
1260  
agtactgaga taatgaaaag accaaagtac tgcagcagtg acagcagtta tgatagtagc  
1320  
agcagctctt cagaatctga cgaaaatgaa aaagaagagt accaaaataa gaaaagagaa  
1380  
aagcaagtta catataatct taaacctcc aaccactaca aattaattca acaaccagc  
1440  
tccataagac gttcagtcag ctgccctcgg tccatctctg ctcaatcacc ttccagtggg  
1500  
gacaccgcc cattttctgc tcaacaaatg atatctgtgt cacggccaac ttctgcatct  
1560  
cggtcacatt ccttaaaccg gggccttcct cctacatgag gcattctgct cacagtaatg  
1620  
atgctgctc taccaactct caagtgagtg agtctttgag gcaactgaaa aaaaagaac  
1680

aagaagatga tctaacaagt cagaccttat ttgttctcaa agacatgaag atccggtttc

1740

caggaaaag

1748

<210> 2320

<211> 532

<212> PRT

<213> Homo sapiens

<400> 2320

Xaa	Ile	Lys	Ser	Arg	Ser	Leu	Asp	Tyr	Thr	Phe	Val	Pro	Arg	Thr	Trp
1			5						10					15	
Ile	Phe	Pro	Ala	Glu	Tyr	Thr	Gln	Phe	Gln	Asn	Tyr	Val	Lys	Glu	Leu
		20					25					30			
Lys	Lys	Lys	Arg	Lys	Gln	Lys	Thr	Phe	Ile	Val	Lys	Pro	Ala	Asn	Gly
	35					40					45				
Ala	Met	Gly	His	Gly	Ile	Ser	Leu	Ile	Arg	Asn	Gly	Asp	Lys	Leu	Pro
	50				55					60					
Ser	Gln	Asp	His	Leu	Ile	Val	Gln	Glu	Tyr	Ile	Glu	Lys	Pro	Phe	Leu
65				70					75					80	
Met	Glu	Gly	Tyr	Lys	Phe	Asp	Leu	Arg	Ile	Tyr	Ile	Leu	Val	Thr	Ser
			85					90					95		
Cys	Asp	Pro	Leu	Lys	Ile	Phe	Leu	Tyr	His	Asp	Gly	Leu	Val	Arg	Met
		100					105						110		
Gly	Thr	Glu	Lys	Tyr	Ile	Pro	Pro	Asn	Glu	Ser	Asn	Leu	Thr	Gln	Leu
	115					120						125			
Tyr	Met	His	Leu	Thr	Asn	Tyr	Ser	Val	Asn	Lys	His	Asn	Glu	His	Phe
	130				135					140					
Glu	Arg	Asp	Glu	Thr	Glu	Asn	Lys	Gly	Ser	Lys	Arg	Ser	Ile	Lys	Trp
145				150						155				160	
Phe	Thr	Glu	Phe	Leu	Gln	Ala	Asn	Gln	His	Asp	Val	Ala	Lys	Phe	Trp
			165					170						175	
Ser	Asp	Ile	Ser	Glu	Leu	Val	Val	Lys	Thr	Leu	Ile	Val	Ala	Glu	Pro
		180						185					190		
His	Val	Leu	His	Ala	Tyr	Arg	Met	Cys	Arg	Pro	Gly	Gln	Pro	Pro	Gly
	195					200					205				
Ser	Glu	Ser	Val	Cys	Phe	Glu	Val	Leu	Gly	Phe	Asp	Ile	Leu	Leu	Asp
	210				215					220					
Arg	Lys	Leu	Lys	Pro	Trp	Leu	Leu	Glu	Ile	Asn	Arg	Ala	Pro	Ser	Phe
225				230						235				240	
Gly	Thr	Asp	Gln	Lys	Ile	Asp	Tyr	Asp	Val	Lys	Arg	Gly	Val	Leu	Leu
			245					250						255	
Asn	Ala	Leu	Lys	Leu	Leu	Asn	Ile	Arg	Thr	Ser	Asp	Lys	Arg	Arg	Asn
		260					265						270		
Leu	Ala	Lys	Gln	Lys	Ala	Glu	Ala	Gln	Arg	Arg	Leu	Tyr	Gly	Gln	Asn
	275					280						285			
Ser	Ile	Lys	Arg	Leu	Leu	Pro	Gly	Ser	Ser	Asp	Trp	Glu	Gln	Gln	Arg
	290				295					300					
His	Gln	Leu	Glu	Arg	Arg	Lys	Glu	Glu	Leu	Lys	Glu	Arg	Leu	Ala	Gln
305				310						315				320	
Val	Arg	Lys	Gln	Ile	Ser	Arg	Glu	Glu	His	Glu	Asn	Arg	His	Met	Gly
			325					330						335	
Asn	Tyr	Arg	Arg	Ile	Tyr	Pro	Pro	Glu	Asp	Lys	Ala	Leu	Leu	Glu	Lys

```

          340          345          350
Tyr Glu Asn Leu Leu Ala Val Ala Phe Gln Thr Phe Leu Ser Gly Arg
          355          360          365
Ala Ala Ser Phe Gln Arg Glu Leu Asn Asn Pro Leu Lys Arg Met Lys
          370          375          380
Glu Glu Asp Ile Leu Asp Leu Leu Glu Gln Cys Glu Ile Asp Asp Glu
385          390          395          400
Lys Leu Met Gly Lys Thr Thr Lys Thr Arg Gly Pro Lys Pro Leu Cys
          405          410          415
Ser Met Pro Glu Ser Thr Glu Ile Met Lys Arg Pro Lys Tyr Cys Ser
          420          425          430
Ser Asp Ser Ser Tyr Asp Ser Ser Ser Ser Ser Glu Ser Asp Glu
          435          440          445
Asn Glu Lys Glu Glu Tyr Gln Asn Lys Lys Arg Glu Lys Gln Val Thr
          450          455          460
Tyr Asn Leu Lys Pro Ser Asn His Tyr Lys Leu Ile Gln Gln Pro Ser
465          470          475          480
Ser Ile Arg Arg Ser Val Ser Cys Pro Arg Ser Ile Ser Ala Gln Ser
          485          490          495
Pro Ser Ser Gly Asp Thr Arg Pro Phe Ser Ala Gln Gln Met Ile Ser
          500          505          510
Val Ser Arg Pro Thr Ser Ala Ser Arg Ser His Ser Leu Asn Pro Gly
          515          520          525
Leu Pro Pro Thr
          530

```

&lt;210&gt; 2321

&lt;211&gt; 433

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2321

```

caattgtgtg gacgtgtcta tgtgtgtttc taattctata ctatcttgaa aatgggttcag
60
cgttctagaa atacagccac ataatttttt ttgttttgaa aaactgctca gcaaatgcat
120
acaggtcata atggcaggta acagaccatt tattgaagtg ctgaaacaaa tagaaaacaa
180
agtcaggac accatcacag agcagtactt cccttgtag atactctcag ctaagtaaga
240
attgagtgag acaacaataa aacaaatacc cataggcttt tcaaacagta acaaccgct
300
cagggttagc agcatttcta gaccttgatg gtaaatgat gttctcaacc ttgctttca
360
gacactggat cactgcttaa gtagccttta tcttttcccc ctaatttttg ttgaagatgc
420
cagaggtgga gtg
433

```

&lt;210&gt; 2322

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2322

```

Met Leu Leu Thr Leu Ser Gly Leu Leu Leu Phe Glu Lys Pro Met Gly
 1             5             10             15
Ile Cys Phe Ile Val Val Ser Leu Asn Ser Tyr Leu Ala Glu Ser Ile
      20             25             30
Ser Gln Gly Lys Tyr Cys Ser Val Met Val Ser Trp Thr Leu Phe Ser
      35             40             45
Ile Cys Phe Ser Thr Ser Ile Asn Gly Leu Leu Pro Ala Ile Met Thr
      50             55             60
Cys Met His Leu Leu Ser Ser Phe Ser Lys Gln Lys Lys Leu Cys Gly
      65             70             75             80
Cys Ile Ser Arg Thr Leu Asn His Phe Gln Asp Ser Ile Glu Leu Glu
      85             90             95
Thr His Ile Asp Thr Ser Thr Gln Leu
      100             105

```

&lt;210&gt; 2323

&lt;211&gt; 532

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2323

```

acgcgtcaaa actggcaaaag ctggcggtt agggggaggg gcaagtggac ttggaggccc
60
tcctccactg tgcacccct tggaaaaaa gcggaggggg catcaagtaa aagtttcttg
120
ccaggcagag ccagctcggc ggcctccgc acatagctgg ggtagcagg ggttgcttct
180
ctgccgggca cagcgtctc caggagccag ccggggagag ctgagccaag gccgaaggag
240
ccgcctgcgg gcttagccgc cccctccgc cgttgggccc cagagcggac gctgggacgc
300
ccgggggtctg gcagctctgc gcccggtag gagcgggcgg gcgagcatta gcctgcgtcc
360
tgagagaagg ggcagcgcc gcagttgagg ccgaagcagc ccctcgcggg cgtaggatac
420
ctgtcagtga ggcctccgat tgcacggccc ccgggtagtg cctgccggcg aggggcggga
480
gctcgggtga cttggccatc cccatccccg gccagggccc ggagggcggc cg
532

```

&lt;210&gt; 2324

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2324

```

Thr Arg Gln Asn Trp Gln Ser Trp Arg Leu Arg Gly Arg Gly Lys Trp
 1             5             10             15
Thr Trp Arg Pro Ser Ser Thr Val His Pro Leu Gly Lys Lys Ala Glu
      20             25             30
Gly Ala Ser Ser Lys Ser Phe Leu Pro Gly Arg Ala Ser Ser Ala Ala
      35             40             45
Pro Arg Thr

```

50

<210> 2325  
 <211> 459  
 <212> DNA  
 <213> Homo sapiens

<400> 2325  
 nnacgcgtgc aggaccgcat gagcgccatc tgggagagag gagggttgaggaggaaagatg  
 60  
 gatgagaacc gttttgtggc cgttaccagt tccaacgcag ctaagcttct gaacctgtat  
 120  
 ccccgcaagg gccgcattat tcccggagcc gatgctgatg tgggtggtg ggaccagaa  
 180  
 gccacaaaga ccattctcagc cagcacgcag gtccagggag gagacttcaa cctgtatgag  
 240  
 aacatgcgct gccacggcgt gccactggtc accatcagcc gggggcgcg cgtgtatgag  
 300  
 aacggcgctct tcattgtgcgc cgagggcacc ggcaagtctt gtcccctgag gtccttccca  
 360  
 gacactgtct acaagaagct ggtccagaga gagaagactt taaaggtag aggagtggcc  
 420  
 cgcactccct acctggggga tgctcgctgtt gtcgtgcac  
 459

<210> 2326  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<400> 2326  
 Xaa Arg Val Gln Asp Arg Met Ser Ala Ile Trp Glu Arg Gly Val Val  
 1 5 10 15  
 Gly Gly Lys Met Asp Glu Asn Arg Phe Val Ala Val Thr Ser Ser Asn  
 20 25 30  
 Ala Ala Lys Leu Leu Asn Leu Tyr Pro Arg Lys Gly Arg Ile Ile Pro  
 35 40 45  
 Gly Ala Asp Ala Asp Val Val Val Trp Asp Pro Glu Ala Thr Lys Thr  
 50 55 60  
 Ile Ser Ala Ser Thr Gln Val Gln Gly Gly Asp Phe Asn Leu Tyr Glu  
 65 70 75 80  
 Asn Met Arg Cys His Gly Val Pro Leu Val Thr Ile Ser Arg Gly Arg  
 85 90 95  
 Val Val Tyr Glu Asn Gly Val Phe Met Cys Ala Glu Gly Thr Gly Lys  
 100 105 110  
 Phe Cys Pro Leu Arg Ser Phe Pro Asp Thr Val Tyr Lys Lys Leu Val  
 115 120 125  
 Gln Arg Glu Lys Thr Leu Lys Val Arg Gly Val Ala Arg Thr Pro Tyr  
 130 135 140  
 Leu Gly Asp Val Ala Val Val Val His  
 145 150

<210> 2327  
 <211> 599

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2327

gaattccaga agatcaagta ttctacgat gccctggaga agaagcagtt tctccccgtg  
 60  
 gcctttcctg tgggaaacgc cttctcatac tatcagagca acagaggctt ccaggaagac  
 120  
 tcagagatcc gagcagctga gaagaaattt gggagcaaca aggccgagat ggtggtgcct  
 180  
 gactttctcg agcttttcaa ggagagagcc acagccccct tctttgtatt tcaggtgttc  
 240  
 tgtgtggggc tctggtgcct ggatgagtac tggactaca gcgtctttac gctatccatg  
 300  
 ctggtggcgt tcgaggcctc gctggtgcag cagcagatgc ggaacatgtc ggagatccgg  
 360  
 aagatgggca acaagcccca catgatccag gtctaccgaa gccgcaagtg gagggccatt  
 420  
 gccagtgatg agatcgtacc aggggacatc gtctccatcg gtgaggccgg gttccgctca  
 480  
 gtcccagtgg gagccccagc ctcagggcct ctggccaacc ctctgctc tgccctgcag  
 540  
 gccgctcccc acaggagaac ctggtgccat gtgacgtgct tctgtgcga ggccgctgc  
 599

&lt;210&gt; 2328

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2328

Glu	Phe	Gln	Lys	Ile	Lys	Tyr	Ser	Tyr	Asp	Ala	Leu	Glu	Lys	Lys	Gln
1			5						10					15	
Phe	Leu	Pro	Val	Ala	Phe	Pro	Val	Gly	Asn	Ala	Phe	Ser	Tyr	Tyr	Gln
			20					25					30		
Ser	Asn	Arg	Gly	Phe	Gln	Glu	Asp	Ser	Glu	Ile	Arg	Ala	Ala	Glu	Lys
		35					40					45			
Lys	Phe	Gly	Ser	Asn	Lys	Ala	Glu	Met	Val	Val	Pro	Asp	Phe	Ser	Glu
	50				55					60					
Leu	Phe	Lys	Glu	Arg	Ala	Thr	Ala	Pro	Phe	Phe	Val	Phe	Gln	Val	Phe
65					70					75				80	
Cys	Val	Gly	Leu	Trp	Cys	Leu	Asp	Glu	Tyr	Trp	Tyr	Tyr	Ser	Val	Phe
			85						90				95		
Thr	Leu	Ser	Met	Leu	Val	Ala	Phe	Glu	Ala	Ser	Leu	Val	Gln	Gln	Gln
			100						105				110		
Met	Arg	Asn	Met	Ser	Glu	Ile	Arg	Lys	Met	Gly	Asn	Lys	Pro	His	Met
		115					120					125			
Ile	Gln	Val	Tyr	Arg	Ser	Arg	Lys	Trp	Arg	Pro	Ile	Ala	Ser	Asp	Glu
	130					135				140					
Ile	Val	Pro	Gly	Asp	Ile	Val	Ser	Ile	Gly	Glu	Ala	Gly	Phe	Arg	Ser
145					150					155				160	
Val	Pro	Val	Gly	Ala	Pro	Ala	Ser	Gly	Pro	Leu	Ala	Asn	Pro	Pro	Ala
			165						170				175		
Ser	Ala	Leu	Gln	Ala	Ala	Pro	His	Arg	Arg	Thr	Trp	Cys	His	Val	Thr

180  
Cys Phe Cys Cys Glu Ala Ala  
195

185

190

<210> 2329  
<211> 392  
<212> DNA  
<213> Homo sapiens

<400> 2329  
acgcgttcca tgaatgctgg tgcggctgcc gcgattgcta tgtacgcctg gacgacgcag  
60  
tggtgtccaa agccacgcac tagctgatcg gggagaaccg tcacctcta ggctcgtgtc  
120  
atgagcacgc aaccactga ggaaccactc cgactagttg tggcattcaa tccagtgcct  
180  
agtgcctccc gggttgctca tcatcatgcg acgagatttc gcctggcggt gcaggccttc  
240  
attgctgctg tcattggtgg tttgtgtggt gcgttgacgg ccgacgcctt ccagttatcg  
300  
acgggtgatgt ggatgctcgg ggcattgggtg gtgctattcc tcgtgctttt cgtcatccag  
360  
aatctgcggc tgcaacgcgc tcgcaaggat cc  
392

<210> 2330  
<211> 90  
<212> PRT  
<213> Homo sapiens

<400> 2330  
Met Ser Thr Gln Pro Thr Glu Glu Pro Leu Arg Leu Val Val Ala Phe  
1 5 10 15  
Asn Pro Val Pro Ser Ala Ser Arg Val Ala His His His Ala Thr Arg  
20 25 30  
Phe Arg Leu Ala Val Gln Ala Phe Ile Val Val Val Ile Gly Gly Leu  
35 40 45  
Leu Trp Ala Leu Thr Ala Asp Ala Phe Gln Leu Ser Thr Val Met Trp  
50 55 60  
Met Leu Gly Ala Trp Val Val Leu Phe Leu Val Leu Phe Val Ile Gln  
65 70 75 80  
Asn Leu Arg Leu His Ala Ala Arg Lys Asp  
85 90

<210> 2331  
<211> 2813  
<212> DNA  
<213> Homo sapiens

<400> 2331  
nnggagcaag agagttatta aaagtgggtg gaagacttcc tgggtgcagga ggctcactcc  
60  
gatttaaggt gcccaggtcc acgctgatgg actgccgtag acaactgaaa gacagtaagc  
120



aaatTTtAtc tAttacaAag aactTTtaag ttgagaatat tggacctctt cctataactg  
180  
tttcgtctct gaaaattaat gggTataact gccAaggtta tggattcgag gtgctggatt  
240  
gggattcagt tccccctgga cccaaacaca tcccgcgata tcagcattgt gttcactcca  
300  
gactttacct cctcctgggt aattcgggac ctaagtcttg taaccgcagc ggacctagaa  
360  
tttcgtctca ctctcaatgt gactctccct catcacctgt tgccttctg tgcagacgtg  
420  
gttccaggac ccagctggga ggagtcattt tggaggctca cggctctctt tgtcagtttg  
480  
tcctgtttgg gtgtgatttt aatagccttc caacaagcac agtacattct catggaattc  
540  
atgaaaaaaa gacagaggca aaatgctagc tcctcttcac agcaaaaaaa tggtcctatg  
600  
gatgtaatca gccccattc ttacaaaagc aattgcaaga actttctcga tacatatggc  
660  
ccctctgata aaggcagggg gaagaactgc cttccagtga aactcccca aagcaggatc  
720  
cagaatgctg caaagaggag ccagccacc tatggtcatt ctCagaagaa gcacaaatgc  
780  
tcagtgtatt acagtaaaca caaaaccagc acagctgcgg ccagcagcac cagcacgact  
840  
actgaggaaa aacagacttc acccctgggc agctcactgc ctgctgctaa agaggacatt  
900  
tgcaactgat ccatgcgtga gaactggatc agcctcagat atgcaagtgg cataaatgtc  
960  
aacctgcaga agaatttaac cttcccaaaa aacttactga ataaagaaga aaacacactg  
1020  
aaaaacacaa ttgttttcag taatccttct tcagaatgta gtatgaagga gggaatacag  
1080  
acatgtatgt ttCctaagga aactgacatt aaaacttcag agaacacagc tgagttcaag  
1140  
gaacgggagc tctgtccact gaagacctcc aagaaactac ctgaaaacca tttaccaaga  
1200  
aactcacctc agtaccacca gccagacttg ccagaaatct ccaggaaaaa taatgggaat  
1260  
aaccagcaag tacctgtcaa gaatgaagta gatcattgtg aaaatttgaa gaaggtggac  
1320  
acaaagcctt cttcagaaaa gaagattcac aaaacatcta gagaagacat gttttctgag  
1380  
aaacaggaca tacctttcgt agagcaagaa gatccttata ggaagaaaaa gcttcaggag  
1440  
aaaagagaag gaaatttaca aaatttaaat tggagtaaaa gtcgaacatg tagaaagaac  
1500  
aagaaaaggg gtgttgctcc agtctcaagg cctcctgaac agagtgatct aaagcttgtg  
1560  
tgcaagtact ttgagaggtc tgagctgagc agtgacatca atgtaagaag ctggtgtata  
1620  
caggaaagca ctagggaggt ttgtaaagca gatgccgaaa ttgcaagcag tttacctgct  
1680  
gcccagagag aggcagggtta ctaccagaag cctgagaaga aatgtgtgga caagttctgc  
1740

tccgattcca gctctgactg tgggagctcc tctggcagcg tgcgtgccag ccggggcagc  
 1800  
 tgggggagct ggagcagcac cagcagctcc gacggggata agaagcccat ggtggacgcc  
 1860  
 cagcacttcc tgccggcccg agacagtgtt tcacaaaatg attttccttc tgaagctccc  
 1920  
 atctccttga atctttctca taacatctgc aatcccatga ccgtgaatag tctcccacaa  
 1980  
 tacgcagagc cttcctgtcc cagccttcct gccgggcccc cagggtgtga agaagataaa  
 2040  
 ggtctttact cacctggaga cctgtggccc actccgccag tgtgtgtgac aagcagctta  
 2100  
 aactgcaccc tggagaacgg cgtgccttgt gtgattcagg agtcggcccc gggtcataat  
 2160  
 agtttcattg attggagtgc aacatgcgaa ggccagtttt ccagcgcata ctgtccattg  
 2220  
 gaattgaacg attacaatgc ctttccagaa gaaaacatga actatgccaa tggcttcccc  
 2280  
 tgtcctgcag atgttcagac agactttatt gatcacaact ctcagtctac ctggaacacc  
 2340  
 ccaccaaca tgccctgtgc ctggggacat gccagtttca tcagctctcc gccctacctc  
 2400  
 acaagcacc gaagcttgct tccaatgtct ggactttttg gttccatctg ggccccgcaa  
 2460  
 agcgatgtgt atgaaaattg ctgccccatc aacccacca cggaacattc gaccacatg  
 2520  
 gaaaaccaag cggctcgtgt caaggaatac taccgggggt tcaaccggtt tcgcgcctat  
 2580  
 atgaacctgg acatatggac taccacagcg aataggaatg caaatttccc actgtctaga  
 2640  
 gactcgagtt actgtgggaa tgtgtgaaaa taattggatt tttaaacaat gtgaataaag  
 2700  
 aggcttgtgt tttgattact agtgtaaaact gggtattgag atagattatg acattggtgg  
 2760  
 atattttggc acttttatat gaaaataaat tttttaatga aaaaaaaaaa aaa  
 2813

&lt;210&gt; 2332

&lt;211&gt; 789

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2332

Pro	Asp	Phe	Thr	Ser	Ser	Trp	Val	Ile	Arg	Asp	Leu	Ser	Leu	Val	Thr
1				5					10					15	
Ala	Ala	Asp	Leu	Glu	Phe	Arg	Phe	Thr	Leu	Asn	Val	Thr	Leu	Pro	His
		20						25					30		
His	Leu	Leu	Pro	Leu	Cys	Ala	Asp	Val	Val	Pro	Gly	Pro	Ser	Trp	Glu
	35						40					45			
Glu	Ser	Phe	Trp	Arg	Leu	Thr	Val	Phe	Phe	Val	Ser	Leu	Ser	Leu	Leu
	50					55				60					
Gly	Val	Ile	Leu	Ile	Ala	Phe	Gln	Gln	Ala	Gln	Tyr	Ile	Leu	Met	Glu
65				70					75					80	
Phe	Met	Lys	Thr	Arg	Gln	Arg	Gln	Asn	Ala	Ser	Ser	Ser	Ser	Gln	Gln

[illegible]

515                      520                      525  
 Asp Ser Val Ser Gln Asn Asp Phe Pro Ser Glu Ala Pro Ile Ser Leu  
 530                      535                      540  
 Asn Leu Ser His Asn Ile Cys Asn Pro Met Thr Val Asn Ser Leu Pro  
 545                      550                      555                      560  
 Gln Tyr Ala Glu Pro Ser Cys Pro Ser Leu Pro Ala Gly Pro Thr Gly  
 565                      570                      575  
 Val Glu Glu Asp Lys Gly Leu Tyr Ser Pro Gly Asp Leu Trp Pro Thr  
 580                      585                      590  
 Pro Pro Val Cys Val Thr Ser Ser Leu Asn Cys Thr Leu Glu Asn Gly  
 595                      600                      605  
 Val Pro Cys Val Ile Gln Glu Ser Ala Pro Val His Asn Ser Phe Ile  
 610                      615                      620  
 Asp Trp Ser Ala Thr Cys Glu Gly Gln Phe Ser Ser Ala Tyr Cys Pro  
 625                      630                      635                      640  
 Leu Glu Leu Asn Asp Tyr Asn Ala Phe Pro Glu Glu Asn Met Asn Tyr  
 645                      650                      655  
 Ala Asn Gly Phe Pro Cys Pro Ala Asp Val Gln Thr Asp Phe Ile Asp  
 660                      665                      670  
 His Asn Ser Gln Ser Thr Trp Asn Thr Pro Pro Asn Met Pro Ala Ala  
 675                      680                      685  
 Trp Gly His Ala Ser Phe Ile Ser Ser Pro Pro Tyr Leu Thr Ser Thr  
 690                      695                      700  
 Arg Ser Leu Ser Pro Met Ser Gly Leu Phe Gly Ser Ile Trp Ala Pro  
 705                      710                      715                      720  
 Gln Ser Asp Val Tyr Glu Asn Cys Cys Pro Ile Asn Pro Thr Thr Glu  
 725                      730                      735  
 His Ser Thr His Met Glu Asn Gln Ala Val Val Cys Lys Glu Tyr Tyr  
 740                      745                      750  
 Pro Gly Phe Asn Pro Phe Arg Ala Tyr Met Asn Leu Asp Ile Trp Thr  
 755                      760                      765  
 Thr Thr Ala Asn Arg Asn Ala Asn Phe Pro Leu Ser Arg Asp Ser Ser  
 770                      775                      780  
 Tyr Cys Gly Asn Val  
 785

<210> 2333  
 <211> 501  
 <212> DNA  
 <213> Homo sapiens

<400> 2333  
 cgtatgattg gtgtgggaca aatactattc aacaagagta cctaaatcat tgtttaaggc  
 60  
 gaagtaataa atatgaatgg ggtgtatcat ataatgaaca acgaatatcc atatatgtgca  
 120  
 gacgaagttc ttcacaaagc aaaatcatat ttgtcagcag atgaatatga gtatgtttta  
 180  
 aaaagctatc atattgctta tgaagcacat aaaggtcagt tccgaaaaaa cggattacca  
 240  
 tacattatgc atcctataca agttgcaggt attttaacag aaatgcgatt agacggaccg  
 300  
 acgattgtcg cagggtttttt gcatgatgta attgaagata caccgtatac atttgaagat  
 360

gtaaaagaaa tgttcaatga agaagttgct cgaattgttg atggtgtgac gaagcttaaa  
 420  
 aaaataaaaat accgctcaaa agaagaacaa caagctgaaa atcatcgcaa gttattttatt  
 480  
 gcgattgccca aagatgtacg c  
 501

<210> 2334  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 2334  
 Met Asn Gly Val Tyr His Ile Met Asn Asn Glu Tyr Pro Tyr Ser Ala  
 1 5 10 15  
 Asp Glu Val Leu His Lys Ala Lys Ser Tyr Leu Ser Ala Asp Glu Tyr  
 20 25 30  
 Glu Tyr Val Leu Lys Ser Tyr His Ile Ala Tyr Glu Ala His Lys Gly  
 35 40 45  
 Gln Phe Arg Lys Asn Gly Leu Pro Tyr Ile Met His Pro Ile Gln Val  
 50 55 60  
 Ala Gly Ile Leu Thr Glu Met Arg Leu Asp Gly Pro Thr Ile Val Ala  
 65 70 75 80  
 Gly Phe Leu His Asp Val Ile Glu Asp Thr Pro Tyr Thr Phe Glu Asp  
 85 90 95  
 Val Lys Glu Met Phe Asn Glu Glu Val Ala Arg Ile Val Asp Gly Val  
 100 105 110  
 Thr Lys Leu Lys Lys Ile Lys Tyr Arg Ser Lys Glu Glu Gln Gln Ala  
 115 120 125  
 Glu Asn His Arg Lys Leu Phe Ile Ala Ile Ala Lys Asp Val Arg  
 130 135 140

<210> 2335  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 2335  
 ggatcctgag cgtggggact tctttgcact ccacagaacc ctcacttgta cctctacttt  
 60  
 tctctgcaga tggaccacac agcattcccc tgtggctgct gcagggaggg ctgtgagaac  
 120  
 cccatgggccc gtgtggaatt taatcaggca agagttcaga cccatttcat ccacacactc  
 180  
 acccgctgac agttggaaca ggaggctgag agcttttaggg agctggaggc cctgcccag  
 240  
 ggcagcccac ccagccctgg tgaggaggcc ctgggtcccta ctttcccact ggccaagccc  
 300  
 cccatgaaca atgagctggg agacaacagc tgcagcagcg acatgactga ttcttcaca  
 360  
 gcatttcat cagcatcggg cactagt  
 387

<210> 2336

<211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2336  
 Met Asp His Thr Ala Phe Pro Cys Gly Cys Cys Arg Glu Gly Cys Glu  
 1 5 10 15  
 Asn Pro Met Gly Arg Val Glu Phe Asn Gln Ala Arg Val Gln Thr His  
 20 25 30  
 Phe Ile His Thr Leu Thr Arg Leu Gln Leu Glu Gln Glu Ala Glu Ser  
 35 40 45  
 Phe Arg Glu Leu Glu Ala Pro Ala Gln Gly Ser Pro Pro Ser Pro Gly  
 50 55 60  
 Glu Glu Ala Leu Val Pro Thr Phe Pro Leu Ala Lys Pro Pro Met Asn  
 65 70 75 80  
 Asn Glu Leu Gly Asp Asn Ser Cys Ser Ser Asp Met Thr Asp Ser Ser  
 85 90 95  
 Thr Ala Ser Ser Ser Ala Ser Gly Thr Ser  
 100 105

<210> 2337  
 <211> 359  
 <212> DNA  
 <213> Homo sapiens

<400> 2337  
 ngagaagagg aggagtcac gccaggggcc gccatctcca ggctcgcca agccgctggg  
 60  
 accatgtgca gctcaagaat ggctccggc ccatcgccct cggggcaggg gaagggcagc  
 120  
 ttctctgcac cagcttccct gctgggctcc agggcccaca ggctgaggcc gggggcccag  
 180  
 gggtaaatgc caggcaccct gctattgagg aacctatcca ggaggaagga ctcgggcaga  
 240  
 cctgcgggat cctcgctctc ccacgggtcc tcatggcaga agcagaagga gctggagtcg  
 300  
 ctgaggtccg tgggcaggcg ggctgggccc aacgtggggt caccgacctc ctcaaagct  
 359

<210> 2338  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2338  
 Met Cys Ser Ser Arg Met Ala Ser Gly Pro Ser Ala Ser Gly Gln Gly  
 1 5 10 15  
 Lys Gly Ser Phe Ser Ala Pro Ala Ser Leu Leu Gly Ser Arg Ala His  
 20 25 30  
 Arg Leu Arg Pro Gly Ala Gln Gly Ser Met Pro Gly Thr Leu Leu Leu  
 35 40 45  
 Arg Asn Leu Ser Arg Arg Lys Asp Ser Gly Arg Pro Ala Gly Ser Ser  
 50 55 60  
 Ser Ser His Gly Ser Ser Trp Gln Lys Gln Lys Glu Leu Glu Ser Leu

65                      70                      75                      80  
Arg Ser Val Gly Arg Arg Ala Gly Pro Asn Val Gly Ser Pro Thr Ser  
                              85                      90                      95  
Ser Lys

```
<210> 2339
<211> 439
<212> DNA
<213> Homo sapiens
```

```
<400> 2339
acgcgtggcg tcagtcagg cagacttggg aggtcgccca caccgtcaac tcggttgcca
60
ccctgtcctc caccttcgtc gtcgcagtcg tcagtgtcct gtggtttgtg ccctccgggc
120
actgggtccc gtagggcttg taatgctggg gcgctcggcg cgatgtgccca gttccttggg
180
gagttactcc tctacactgg tgtgaacaag accggagaat tcccccccat attctcgttt
240
cccgctcgtc ccgcacgtca ttgggactgg cttttacgcg gtagtggttg ccgtactctg
300
gttgctctgc ggcacggtcg gcagggggat catgtcatga gtccgacggt gacgagcgcg
360
cgtcttagcg cgccaatgcg acgtggcatc gtggcactgt gcgtggcgat ggccttcgtg
420
ttgtcggggg gcggtgctg
439
```

```
<210> 2340
<211> 92
<212> PRT
<213> Homo sapiens
```

<400> 2340																	
Met	Cys	Gln	Phe	Leu	Gly	Glu	Leu	Leu	Leu	Tyr	Thr	Gly	Val	Asn	Lys		
1				5					10					15			
Thr	Gly	Glu	Phe	Pro	Pro	Ile	Phe	Ser	Phe	Pro	Ala	Arg	Pro	Ala	Arg		
			20					25					30				
His	Trp	Asp	Trp	Leu	Leu	Arg	Gly	Ser	Gly	Cys	Arg	Thr	Leu	Val	Ala		
		35					40					45					
Leu	Arg	His	Gly	Arg	Gln	Gly	Asp	His	Val	Met	Ser	Pro	Thr	Val	Ser		
	50					55					60						
Glu	Arg	Arg	Leu	Ser	Ala	Pro	Met	Arg	Arg	Gly	Ile	Val	Ala	Leu	Cys		
65					70					75					80		
Val	Ala	Met	Ala	Phe	Val	Leu	Ser	Gly	Cys	Gly	Ala						
				85					90								

```
<210> 2341
<211> 411
<212> DNA
<213> Homo sapiens
```

<400> 2341

gccaaacctc cctccatcc tgccaagat ggatcttgcg gagcctccct ggcatatgcc  
 60  
 tctgcaggag gagccagagg aggtcacgga ggaggaggag gaaagggag aagaggagag  
 120  
 ggagaaggaa gcagaggagg aggaggaaga ggaagagctg ctctgtgag cgggtcccca  
 180  
 ggagccaccg cacaggccca tgcccttca cctagcacca gcagcagcac cagcagccag  
 240  
 agtcctgggg ccaccggca caggcaggag gattctggag accaggccac atcaggcnat  
 300  
 ggaagtggag agcagtgtga aaccacctt gtcagtcccc tcagtcaccc caagtacagt  
 360  
 ggccccgggg gttcagaact atagccagga gtctgggggc actgagtggc n  
 411

<210> 2342

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2342

Ala	Ser	Leu	Ala	Tyr	Ala	Ser	Ala	Gly	Gly	Ala	Arg	Gly	Gly	His	Gly
1			5					10						15	
Gly	Gly	Gly	Gly	Lys	Gly	Arg	Arg	Gly	Glu	Gly	Glu	Gly	Ser	Arg	Gly
		20						25					30		
Gly	Gly	Gly	Arg	Gly	Arg	Ala	Ala	Pro	Val	Ser	Gly	Ser	Pro	Gly	Ala
		35				40					45				
Thr	Ala	Gln	Ala	His	Ala	Pro	Ser	Pro	Ser	Thr	Ser	Ser	Ser	Thr	Ser
	50				55					60					
Ser	Gln	Ser	Pro	Gly	Ala	Thr	Arg	His	Arg	Gln	Glu	Asp	Ser	Gly	Asp
65				70					75					80	
Gln	Ala	Thr	Ser	Gly	Xaa	Gly	Ser	Gly	Glu	Gln	Cys	Glu	Thr	His	Leu
			85					90						95	
Val	Ser	Ala	Leu	Ser	His	Pro	Lys	Tyr	Ser	Gly	Pro	Gly	Gly	Ser	Glu
			100					105						110	
Leu															

<210> 2343

<211> 522

<212> DNA

<213> Homo sapiens

<400> 2343

ggcccgcaga agatgctgat gccttcacag tttcccaacc agggccagca gggattctct  
 60  
 ggaggccagg gaccctacca agccatgtcc caggacatgg gcaataccca agacatgttc  
 120  
 agccctgacg agagctcaat gcccatgagc aacgtgggca ccaccggct cagccacatg  
 180  
 cctctgcccc ctgcgtccaa tctctctggg accgtgcatt cagccccaaa ccgggggcta  
 240  
 ggcaggcggc cttcggacct caccatcagt attaalcaga tgggctcacc gggcatgggg  
 300



cacttgaagt cgcccacct tagccaggtg cactcacccc tggtcacctc gccctctgcc  
 360  
 aacctcaagt caccacagac tccctcacag atgggtgccct tgccttctgc caaccgcca  
 420  
 ggacctctca agtcgcccc ggtcctcggc tctcctctca gtgtccgttc acccaactggc  
 480  
 tcgcccagca ggctcaagtc tcttccatg gcggtgcctt ct  
 522

<210> 2344

<211> 174

<212> PRT

<213> Homo sapiens

<400> 2344

Gly	Pro	Gln	Lys	Met	Leu	Met	Pro	Ser	Gln	Phe	Pro	Asn	Gln	Gly	Gln
1				5					10					15	
Gln	Gly	Phe	Ser	Gly	Gly	Gln	Gly	Pro	Tyr	Gln	Ala	Met	Ser	Gln	Asp
		20						25					30		
Met	Gly	Asn	Thr	Gln	Asp	Met	Phe	Ser	Pro	Asp	Gln	Ser	Ser	Met	Pro
		35					40					45			
Met	Ser	Asn	Val	Gly	Thr	Thr	Arg	Leu	Ser	His	Met	Pro	Leu	Pro	Pro
		50				55					60				
Ala	Ser	Asn	Pro	Pro	Gly	Thr	Val	His	Ser	Ala	Pro	Asn	Arg	Gly	Leu
65					70					75				80	
Gly	Arg	Arg	Pro	Ser	Asp	Leu	Thr	Ile	Ser	Ile	Asn	Gln	Met	Gly	Ser
			85						90					95	
Pro	Gly	Met	Gly	His	Leu	Lys	Ser	Pro	Thr	Leu	Ser	Gln	Val	His	Ser
			100					105					110		
Pro	Leu	Val	Thr	Ser	Pro	Ser	Ala	Asn	Leu	Lys	Ser	Pro	Gln	Thr	Pro
		115					120						125		
Ser	Gln	Met	Val	Pro	Leu	Pro	Ser	Ala	Asn	Pro	Pro	Gly	Pro	Leu	Lys
		130				135						140			
Ser	Pro	Gln	Val	Leu	Gly	Ser	Ser	Leu	Ser	Val	Arg	Ser	Pro	Thr	Gly
145					150					155				160	
Ser	Pro	Ser	Arg	Leu	Lys	Ser	Pro	Ser	Met	Ala	Val	Pro	Ser		
			165						170						

<210> 2345

<211> 561

<212> DNA

<213> Homo sapiens

<400> 2345

nagatctccg tcttgatctt gagcaccgag gcactggggg gggaggacag cagccgcggg  
 60  
 ggctccacc agcccgctc caggccgctt gggctcgacg cgctggacag gcgcccgcgg  
 120  
 ctggcgtgc cgcccttttg ccgtttccgc cttttcttgc gcttctggtg cttgctggag  
 180  
 gcctgcgcgc ccgcctcgcc tgcgctgtcc gagtccttgg cgctgtcgga cgtgagtgc  
 240  
 tcgcagttct gcagccgcag gtccgactcg ctctccacca tagctattaa tgccaagaat  
 300

gcaaatgaaa agaatatcat ctgggtgaat taccttctta gcaatcctga gtacaaggac  
 360  
 acacccatgg acatcgacaca gctcccccat ctgccggaga aaacttccga atcctcggag  
 420  
 acatccgact ctgagtcaga ctctaaagac acctcaggta ttacagagga caacgagaac  
 480  
 tccaagnntc cgacgagaag gggaaccagt ccgagaacag cgaagaccgg gagcccggacc  
 540  
 ggaagaagtc gggcaacgcg t  
 561

<210> 2346

<211> 187

<212> PRT

<213> Homo sapiens

<400> 2346

Xaa	Ile	Ser	Val	Leu	Ile	Leu	Ser	Thr	Glu	Ala	Leu	Gly	Gly	Glu	Asp
1			5					10					15		
Ser	Ser	Arg	Gly	Leu	His	Gln	Pro	Ala	Ser	Arg	Pro	Pro	Gly	Leu	
		20					25					30			
Asp	Ala	Leu	Asp	Arg	Arg	Arg	Leu	Ala	Leu	Pro	Pro	Phe	Cys	Arg	
		35				40					45				
Phe	Arg	Leu	Phe	Leu	Arg	Phe	Trp	Cys	Leu	Leu	Glu	Ala	Cys	Ala	Pro
	50				55				60						
Ala	Ser	Pro	Ala	Leu	Ser	Glu	Ser	Leu	Ala	Leu	Ser	Asp	Val	Ser	Asp
65				70					75					80	
Ser	Gln	Phe	Cys	Ser	Arg	Arg	Ser	Asp	Ser	Leu	Ser	Thr	Ile	Ala	Ile
			85					90					95		
Asn	Ala	Lys	Asn	Ala	Asn	Glu	Lys	Asn	Ile	Ile	Trp	Val	Asn	Tyr	Leu
		100					105						110		
Leu	Ser	Asn	Pro	Glu	Tyr	Lys	Asp	Thr	Pro	Met	Asp	Ile	Ala	Gln	Leu
		115					120					125			
Pro	His	Leu	Pro	Glu	Lys	Thr	Ser	Glu	Ser	Ser	Glu	Thr	Ser	Asp	Ser
	130				135						140				
Glu	Ser	Asp	Ser	Lys	Asp	Thr	Ser	Gly	Ile	Thr	Glu	Asp	Asn	Glu	Asn
145				150					155					160	
Ser	Lys	Xaa	Pro	Thr	Arg	Arg	Gly	Thr	Ser	Pro	Arg	Thr	Ala	Lys	Thr
			165					170					175		
Arg	Ser	Pro	Thr	Gly	Arg	Ser	Arg	Ala	Thr	Arg					
			180					185							

<210> 2347

<211> 375

<212> DNA

<213> Homo sapiens

<400> 2347

atcagcgaag aacacggcag gacctggaa gacgccgccg gtgaattgaa gcgtggtatc  
 60  
 gagaacgtcg agtacgcctg cgccgcgccg gaagtactga aggggtgaata cagccgtaac  
 120  
 gtcgggtccga acatcgacgc ctggtccgat ttccagccgc tgggcgtggg gccggggatc  
 180

acgccattca acttcccggc gatggtgccc ctgtggatgt atccgttggc gatcgtttgc  
 240  
 ggtaactgct ttatcctcaa gccgtccgag cgtgatccga gctcgacctt gctgatcgcc  
 300  
 cagctgttgc aggaagccgg ttgccc aaa ggtgtgctga acgtggtgca tggtgacaag  
 360  
 accgcggtgg acgcg  
 375

<210> 2348  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 2348  
 Ile Ser Glu Glu His Gly Arg Thr Leu Glu Asp Ala Ala Gly Glu Leu  
 1 5 10 15  
 Lys Arg Gly Ile Glu Asn Val Glu Tyr Ala Cys Ala Ala Pro Glu Val  
 20 25 30  
 Leu Lys Gly Glu Tyr Ser Arg Asn Val Gly Pro Asn Ile Asp Ala Trp  
 35 40 45  
 Ser Asp Phe Gln Pro Leu Gly Val Val Ala Gly Ile Thr Pro Phe Asn  
 50 55 60  
 Phe Pro Ala Met Val Pro Leu Trp Met Tyr Pro Leu Ala Ile Val Cys  
 65 70 75 80  
 Gly Asn Cys Phe Ile Leu Lys Pro Ser Glu Arg Asp Pro Ser Ser Thr  
 85 90 95  
 Leu Leu Ile Ala Gln Leu Leu Gln Glu Ala Gly Leu Pro Lys Gly Val  
 100 105 110  
 Leu Asn Val Val His Gly Asp Lys Thr Ala Val Asp Ala  
 115 120 125

<210> 2349  
 <211> 417  
 <212> DNA  
 <213> Homo sapiens

<400> 2349  
 nnnaaaaaaaaa aaaaacacaa tatttaaatgg acgcggttta ttcagcaggt  
 60  
 gctgacaaag tttttggtgt cccaggagat ttaatactag cctttttaga tgatattatt  
 120  
 gcacataatc atattaaatg gattggtaat acaaatgaac ttaatgcaag ttatgccgct  
 180  
 gacggatatg cacgtattaa tggcatcggt gcaatggtaa caacatttgg agtgggtgaa  
 240  
 ttaagtctg tcaacggaat cgctggatct tatgctgagc gtgtaccagt tattgccatc  
 300  
 actggggcac ctactcgagc tgtagaacia gaaggcaaat acgttcacca ttccttggc  
 360  
 gaaggaactt ttgatgatta tagaaaaatg tttgagccta ttacaacagc gcaagct  
 417

<210> 2350

<211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2350  
 Xaa Lys Lys Lys Lys Lys Lys Lys Thr Gln Tyr Leu Met Asp Ala Val  
 1 5 10 15  
 Tyr Ser Ala Gly Ala Asp Lys Val Phe Gly Val Pro Gly Asp Phe Asn  
 20 25 30  
 Leu Ala Phe Leu Asp Asp Ile Ile Ala His Asn His Ile Lys Trp Ile  
 35 40 45  
 Gly Asn Thr Asn Glu Leu Asn Ala Ser Tyr Ala Ala Asp Gly Tyr Ala  
 50 55 60  
 Arg Ile Asn Gly Ile Gly Ala Met Val Thr Thr Phe Gly Val Gly Glu  
 65 70 75 80  
 Leu Ser Ala Val Asn Gly Ile Ala Gly Ser Tyr Ala Glu Arg Val Pro  
 85 90 95  
 Val Ile Ala Ile Thr Gly Ala Pro Thr Arg Ala Val Glu Gln Glu Gly  
 100 105 110  
 Lys Tyr Val His His Ser Leu Gly Glu Gly Thr Phe Asp Asp Tyr Arg  
 115 120 125  
 Lys Met Phe Glu Pro Ile Thr Thr Ala Gln Ala  
 130 135

<210> 2351  
 <211> 696  
 <212> DNA  
 <213> Homo sapiens

<400> 2351  
 nacgcgttgcc cgcgcgataa ctctggtag ggtcttgctg gggccctgct ggccttggt  
 60  
 ggctccgccc agctgtgcga ccgttcctgg atcaccgacc agtatgaccg gtctgtgcgt  
 120  
 ggcaataactg tgetcgctca gccgaatgat gccggcatga ttcgtattga cgacaacctc  
 180  
 ggcacgcgc tgtccttgga cgctaacgga cgccagacca ccccttaacct gtatcttggc  
 240  
 gccagctgg ctctttgcga ggcttaccgg aatgtggctg tctctggcgc aactccggtg  
 300  
 gctgtcactg attgcctcaa ttatggctcc ccgtacgac ccgatgtcat gtggcaatc  
 360  
 gacgagacca tccttgggtc ggttgacggc tgccgcgagc ttggcgtgcc ggttacgggc  
 420  
 ggtaacgttt cctgcacaa ccgcactgga gatgagtcga ttcggcctac tccgctcggt  
 480  
 ggtgtgctcg gcgttattga tgacgtgcat cgtcgcatcc cgtcggcctt cgcacacgac  
 540  
 ggcgacgctg tcttgcgtct aggaacgacg aagtgcgagt tcggcggatc ggtctatgag  
 600  
 gacgtcatcc acgctggcca cctaggcggg atgccccga tgccccacct gaatgccgag  
 660  
 aaggccctgg ccgcggtgat ggtggaagcg tcgaag  
 696

<210> 2352  
 <211> 232  
 <212> PRT  
 <213> Homo sapiens

<400> 2352  
 Xaa Ala Leu Pro Arg Asp Asn Ser Gly Glu Gly Leu Ala Gly Ala Leu  
 1 5 10 15  
 Leu Ala Leu Val Gly Ser Ala Gln Leu Cys Asp Arg Ser Trp Ile Thr  
 20 25 30  
 Asp Gln Tyr Asp Arg Phe Val Arg Gly Asn Thr Val Leu Ala Gln Pro  
 35 40 45  
 Asn Asp Ala Gly Met Ile Arg Ile Asp Asp Asn Leu Gly Ile Ala Leu  
 50 55 60  
 Ser Leu Asp Ala Asn Gly Arg Gln Thr Thr Leu Asn Pro Tyr Leu Gly  
 65 70 75 80  
 Ala Gln Leu Ala Leu Cys Glu Ala Tyr Arg Asn Val Ala Val Ser Gly  
 85 90 95  
 Ala Thr Pro Val Ala Val Thr Asp Cys Leu Asn Tyr Gly Ser Pro Tyr  
 100 105 110  
 Asp Pro Asp Val Met Trp Gln Phe Asp Glu Thr Ile Leu Gly Leu Val  
 115 120 125  
 Asp Gly Cys Arg Glu Leu Gly Val Pro Val Thr Gly Gly Asn Val Ser  
 130 135 140  
 Leu His Asn Arg Thr Gly Asp Glu Ser Ile Arg Pro Thr Pro Leu Val  
 145 150 155 160  
 Gly Val Leu Gly Val Ile Asp Asp Val His Arg Arg Ile Pro Ser Ala  
 165 170 175  
 Phe Ala His Asp Gly Asp Ala Val Leu Leu Gly Thr Thr Lys Cys  
 180 185 190  
 Glu Phe Gly Gly Ser Val Tyr Glu Asp Val Ile His Ala Gly His Leu  
 195 200 205  
 Gly Gly Met Pro Pro Met Pro Asp Leu Asn Ala Glu Lys Ala Leu Ala  
 210 215 220  
 Ala Val Met Val Glu Ala Ser Lys  
 225 230

<210> 2353  
 <211> 422  
 <212> DNA  
 <213> Homo sapiens

<400> 2353  
 nnagcaatct cagaagaatt gctggctgag ttttcaaact atggtgtcaa agtagtaccg  
 60  
 atttcagggtg atgtttcaga ctttgcagat gccaaagcgtg tggtagatca agcgattaca  
 120  
 gaactcgggtt ctgttgatgt cttgggtcaac aatgctggga tcaactcaaga tacgcttatg  
 180  
 ctcaagatga ccgaagaaga ctttgaaaaa gtgattaaga tcaacttgac aggtgccttc  
 240  
 aacatgacgc aagcagtctt gaaacagatg atcaaggcac gtgaagggtgc gattatcaac  
 300

atgtctagtg tggtcggttt gatgggaaat atcggacaag ccaactatgc agcttctaaa  
 360  
 gcaggettga ttggttttac caagtcagtt gcacgtgaag ttgccaatcg caacgtacgc  
 420  
 gt  
 422

<210> 2354  
 <211> 140  
 <212> PRT  
 <213> Homo sapiens

<400> 2354  
 Xaa Ala Ile Ser Glu Glu Leu Leu Ala Glu Phe Ser Asn Tyr Gly Val  
 1 5 10 15  
 Lys Val Val Pro Ile Ser Gly Asp Val Ser Asp Phe Ala Asp Ala Lys  
 20 25 30  
 Arg Met Val Asp Gln Ala Ile Thr Glu Leu Gly Ser Val Asp Val Leu  
 35 40 45  
 Val Asn Asn Ala Gly Ile Thr Gln Asp Thr Leu Met Leu Lys Met Thr  
 50 55 60  
 Glu Glu Asp Phe Glu Lys Val Ile Lys Ile Asn Leu Thr Gly Ala Phe  
 65 70 75 80  
 Asn Met Thr Gln Ala Val Leu Lys Gln Met Ile Lys Ala Arg Glu Gly  
 85 90 95  
 Ala Ile Ile Asn Met Ser Ser Val Val Gly Leu Met Gly Asn Ile Gly  
 100 105 110  
 Gln Ala Asn Tyr Ala Ala Ser Lys Ala Gly Leu Ile Gly Phe Thr Lys  
 115 120 125  
 Ser Val Ala Arg Glu Val Ala Asn Arg Asn Val Arg  
 130 135 140

<210> 2355  
 <211> 5191  
 <212> DNA  
 <213> Homo sapiens

<400> 2355  
 cttgccaagt ttgacgggtga agtgatctgt gaacctccca acaacaaact ggacaaatc  
 60  
 agcgggaacc tctactggaa ggaaaataag ttcctctga gcaaccagaa catgctgctg  
 120  
 cggggctgtg tgctgcgaaa caccgagtgg tgettccggc tggatcctt tgcaggtcct  
 180  
 gacactaagc tgatgcaaaa cagcggcaga acaaagttca aaagaacgag tatcgatcgc  
 240  
 ctaatgaata ccctgggtgct ctggattttt ggattcctgg tttgcatggg ggtgatcctg  
 300  
 gccattggca atgccatctg ggagcacgag gtggggatgc gtttccaggt ctacctgccg  
 360  
 tgggatgagg cagtggacag tgccttcttc tctggttcc tctccttctg gtctacatc  
 420  
 atcatcctca acaccgttgt gccatttca ctctatgtca gtgtggaggt catccgtctg  
 480

ggccacagct acttcatcaa ctgggataag aagatgttct gcatgaagaa gcggacgcct  
 540  
 gcagaagccc gcaccaccac cctaaacgag gagctgggccc aggtggagta catcttctcc  
 600  
 gacaagacgg gcaccctcac ccagaacatc atgggtttca acaagtgtc catcaatggc  
 660  
 cacagctatg gtgatgtgtt tgacgtcctg ggacacaaaag ctgaattggg agagaggcct  
 720  
 gaacctgttg acttctcctt caatcctctg gctgacaaga agttcttatt ttgggacccc  
 780 aggtgtgtaa gatcggggac cccacacgc atgagttctt ccgcctcctt 840  
 tccctgtgtc atactgtcat gtcagaagaa aagaacgaag gagagctgta ctacaaagct  
 900  
 cagtccccag atgagggggc cctggtcacc gcagccagga actttggttt tgttttcgc  
 960  
 tctgcacccc ccaaaacaat caccgtccat gagatgggca cagccatcac ctaccagctg  
 1020  
 ctggccatcc tggacttcaa caacatccgc aagcggatgt cggtcatagt gcggaatcca  
 1080  
 gaggggaaga tccgactcta ctgcaaaggg gctgacacta tcctactgga cagactgcac  
 1140  
 cactccactc aagagctgct caacaccacc atggaccacc ttaatgagta cgcaggggaa  
 1200  
 gggctgagga ccctgggtgct ggcctacaag gatctggatg aagagtacta cgaggagtgg  
 1260  
 gctgagcgac gcctccaggc cagcctggcc caggacagcc gggaggacag gctggctagc  
 1320  
 atctatgagg aggttgagaa caacatgatg ctgctgggtg caacggccat tgaggacaaa  
 1380  
 cttcagcaag gggttccaga gaccattgcc ctctgacac tggccaacat caagatttgg  
 1440  
 gtgctaaccg gagacaagca agagacggct gtgaacatcg gctattcctg caagatgctg  
 1500  
 acggatgaca tgactgaggt ttcatagtc actggccata ctgtcctgga ggtgcgggag  
 1560  
 gagnctcagg aaagcccggg agaagatgat ggactcatc nccgctccgt aggcaacggc  
 1620  
 ttcacctatc aggacaagct ttcttcttcc aagctaactt ctgtcctgga ggccgttgc  
 1680  
 ggggagtacg ccctgggtcat aaatggtcac agcctggccc acgcactgga ggcagacatg  
 1740  
 gagctggagt ttctggagac agcgtgtgcc tgcaaagctg tcatctgctg ccgggtgacc  
 1800  
 cccttgaga aggcacaggt ggtagaactg gtcaagaagt acaagaaggc tgtgacgctt  
 1860  
 gccattggag acggagccaa tgatgtcagc atgatcaaaa cggtcacat tgggtgtggg  
 1920  
 atcagtgggc aggaagggat ccaggctgtc ttggcctccg attactcctt ctcccagttc  
 1980  
 aagtctctgc agcgctcct gctgggtgat gggcgctggt cctacctgcg aatgtgcaag  
 2040  
 tttctttgct atttcttcta caaaaacttt gctttcacca tgggtccactt ctggtttggc  
 2100  
 ttcttctgtg gcttctcagc ccagaccgtc tatgaccagt atttcatcac cctgtataac  
 2160

atcgtgtaca cctccctgcc agtcctggct atgggggtct ttgatcagga tgtccccgag  
2220  
cagcggagca tggagtaccc taagctgtat gagccgggcc agctgaacct tctcttcaac  
2280  
aagcgggagt tcttcatctg catcgcccag ggcattctaca cctccgtgct catgttcttc  
2340  
attccctatg ggggtgttgc tgatgccacc cgggatgatg gcactcagct ggctgactac  
2400  
cagtcctttg cagtcactgt ggccacatcc ttggtcattg tggttagcgt gcagattggg  
2460  
ctcgacacag gctactggac ggccatcaac cacttcttca tctggggaag ccttgctggt  
2520  
tactttgcca tcctctttgc catgcacagc aatgggctct tcgacatggt tcccaaccag  
2580  
ttccggtttg tggggaatgc ccagaacacc ttggcccagc ccacggtgtg gctgaccatt  
2640  
gtgctcacca cagtcgtctg catcatgccc gtggttgccct tccgattcct caggctcaac  
2700  
ctgaagccgg atctctccga cacggtccgc tacacacagc tcgtgaggaa gaagcagaag  
2760  
gccagcacc gctgcatgcg gcgggttggc cgcactggct cccggcgctc cggctatgcc  
2820  
ttctcccatc aggagggtt cggggagctc atcatgtctg gcaagaacat gcggctgagc  
2880  
tctctcgcgc tctccagctt caccacccgc tccagctcca gctggattga gagcctgcgc  
2940  
aggaagaaga gtgacagtgc cagtagcccc agtggcggtg ccgacaagcc cctcaagggc  
3000  
tgaaggccga ggatggatgc cctgtgccag tgaccagagc acccagggct ggccagtcac  
3060  
tgagggaaca gcgtctcgga actgctggtc ctcattectt gcttcccgtc cccccggtag  
3120  
actctgtcct gctgggtccca ccacacatgg ctgggacatc tgttcccagc tgtaggccct  
3180  
tccaccagct ggggagctag agggagcagg cccaagggca gagcagaggc tgaggcacgg  
3240  
ggagccagcc ccactcgggg accagaagtg gaacaaaaa caagaaaaa ctgtgagaga  
3300  
ttgtgtctgc ccctgccctg cctgggaccc acagggagac tataatctcc ttattttttt  
3360  
actcctactc cccagagggg ccctagtgcc tctgttcctg aattacataa gaatgtacca  
3420  
tgccgggaag ccagagacct gcaggggcct cggcccctca catcgtgtat gtctctcctt  
3480  
gatttgtgtt gtgtccagtt tggttttgtc tttttttatt tggcaagtgg aggaggcttt  
3540  
tatgtgactt ttatgttgtg gttgggtgtc taactctcct gggaaaagga ggctggcaca  
3600  
cactgggatg ccgcagcctg gccggctgtg gsgtggtttg ggaggatcca tgcggctct  
3660  
gcctgcagt accagtgtc tgtggggcag aggagctgac caggagggga ggtaccatg  
3720  
agcagagggt agtgggagag tgtaaaggag ggtttggtcc tgtctgcttc ctcacctga  
3780











```

      50              55              60
Ile Asp Phe Asp Gly Asp Arg Thr Tyr Thr Val Thr Leu Arg Lys Thr
65              70              75              80
Arg Phe Ala Asp Gly Thr Glu Val Lys Ala His Asn Phe Val Lys Ala
      85              90              95
Ala Ala

```

<210> 2359  
 <211> 324  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2359
aacctgaaca tgttgggatt gagagagccc gaggtgtatg ggtcggaaac attggccgac
60
gttgagcaga cgtgtcgtga gtacggcgaa gaacttgggc ttgtaattga gtttcagcaa
120
accaatcacg aaggcgaaat gattgaatgg attcaccacg cccgtagaag gattgcgggg
180
attgtgatca atccaggagc atggacccat acatcggcag ccatccacga tgcgttgatt
240
gcagccgagg taccgggtgat tgaggttcac atctcaaatg tccacaggcg tgaagatttc
300
aggcattttt cctacgtgtc acgc
324

```

<210> 2360  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2360
Asn Leu Asn Met Leu Gly Leu Arg Glu Pro Glu Val Tyr Gly Ser Glu
1      5      10      15
Thr Leu Ala Asp Val Glu Gln Thr Cys Arg Glu Tyr Gly Glu Glu Leu
      20      25      30
Gly Leu Val Ile Glu Phe Gln Gln Thr Asn His Glu Gly Gln Met Ile
      35      40      45
Glu Trp Ile His His Ala Arg Arg Ile Ala Gly Ile Val Ile Asn
      50      55      60
Pro Gly Ala Trp Thr His Thr Ser Ala Ala Ile His Asp Ala Leu Ile
65      70      75      80
Ala Ala Glu Val Pro Val Ile Glu Val His Ile Ser Asn Val His Arg
      85      90      95
Arg Glu Asp Phe Arg His Phe Ser Tyr Val Ser Arg
      100      105

```

<210> 2361  
 <211> 398  
 <212> DNA  
 <213> Homo sapiens

<400> 2361

tccggatggg actccaacct acttgggggt actgggggtg cagaaagaac gcggccctgt  
 60  
 gtcagggacc ggtatggaag cctcagtagg gctggagccc catcatgccc cttccgagca  
 120  
 gatcaacaca gaccagctgg tcaaggggga cctccatccc tgcctgtcc tcacggagct  
 180  
 gtagggagag tcccaaaggc aggtggtggg gctggggcct ccaacagctg ggtcctctca  
 240  
 tatcacttaa ggcccaacag cacacagtct cccaagtgtg ccaggtgcca caacacggcc  
 300  
 atcccgtctt cacagctcca ccccgctgc ctgcctgcca ccctctccac aaacatatgc  
 360  
 tgcagctcca caccgggaa acaccacatg ctcgcttt  
 398

<210> 2362

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2362

Met	Pro	Leu	Pro	Ser	Arg	Ser	Thr	Gln	Thr	Ser	Trp	Ser	Arg	Gly	Thr
1				5					10					15	
Ser	Ile	Pro	Ala	Leu	Ser	Ser	Arg	Ser	Cys	Arg	Glu	Ser	Pro	Lys	Gly
			20					25					30		
Arg	Trp	Trp	Gly	Trp	Gly	Leu	Gln	Gln	Leu	Gly	Pro	Leu	Ile	Ser	Leu
		35					40					45			
Lys	Ala	Gln	Gln	His	Thr	Val	Ser	Gln	Val	Cys	Gln	Val	Pro	Gln	His
	50					55					60				
Gly	His	Pro	Ala	Leu	Thr	Ala	Pro	Pro	Arg	Leu	Pro	Ala	Cys	His	His
65					70					75				80	
Leu	His	Lys	His	Met	Leu	Gln	Leu	His	Thr	Arg	Glu	Thr	Pro	His	Ala
				85					90					95	

Arg Phe

<210> 2363

<211> 833

<212> DNA

<213> Homo sapiens

<400> 2363

nngactcttc tagctcccaa cgcaaaagcg tttaaagatg cagctcagaa gcatcaccag  
 60  
 cagcacaagg ggagggtccca agaaccagaa cttacatcac tgcctccgag ttcagaggtt  
 120  
 tcctttccca ccttctcaga actttctgtt tccatggcct cctctgccac ctctgccacc  
 180  
 tccctgatg tgctggcctc cgtttccatc gcttcctcat ggcgttcttc cgcccgggtg  
 240  
 tccaagccca ctgcangtcg aagcaaactg gattgcgtta ccaactcagaa ggtggcacag  
 300  
 ggactggcag cgggtgccatc tgggagtctg tgtgctcagc ctccgagtgc aggttcccc  
 360

ggcccctgct gtggtgctag gtcccagat gagagatcac ggcatgaag atcagcccc  
 420  
 aaggcagccc cttccttcc agcctgggct ctggcgtgtt ctagggtgctc acttccatgg  
 480  
 ctggcctgct cacagagccc tacctcagcc tgtggtgaagc gcacctgctc ggccctgggtg  
 540  
 ctctatgatg agccaccagt cagttctgca gatgtgtccc cgagctcctg ccgaggggacg  
 600  
 aaacacgggtg gccctgctcc tagtgctgtg gcacgccacg ctccacacct gccatctgcc  
 660  
 cttccaccac ctgctcccc aggggctccg cctcgtgact cacgctcagg caagtctccg  
 720  
 ggcgcaaca gctggctgat ggtgacatgc tgcagcctgg tcacatcaga aaccatgagg  
 780  
 gtggatctcc ggaggtcatc gatgtggaca gactgccaca gcccttcacg cgt  
 833

&lt;210&gt; 2364

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2364

Xaa	Thr	Pro	Leu	Ala	Pro	Asn	Ala	Lys	Ala	Phe	Lys	Asp	Ala	Ala	Gln
1				5					10					15	
Lys	His	His	Gln	Gln	His	Lys	Gly	Arg	Ser	Gln	Glu	Pro	Glu	Leu	Thr
			20					25					30		
Ser	Leu	Pro	Pro	Ser	Ser	Glu	Val	Ser	Phe	Pro	Thr	Phe	Ser	Glu	Leu
		35					40					45			
Ser	Val	Ser	Met	Ala	Ser	Ser	Ala	Thr	Ser	Ala	Thr	Ser	Pro	Asp	Val
	50					55					60				
Leu	Ala	Ser	Val	Ser	Ile	Ala	Ser	Ser	Trp	Arg	Ser	Ser	Ala	Arg	Cys
65					70					75				80	
Ser	Lys	Pro	Thr	Ala	Xaa	Arg	Ser	Lys	Arg	Asp	Cys	Val	Thr	Thr	Gln
				85					90					95	
Lys	Val	Ala	Gln	Gly	Leu	Ala	Ala	Val	Pro	Ser	Gly	Ser	Leu	Cys	Ala
			100					105						110	
Gln	Pro	Pro	Ser	Ala	Gly	Phe	Pro	Gly	Pro	Cys	Cys	Gly	Ala	Arg	Ser
			115					120						125	
Pro	Asp	Glu	Arg	Ser	Arg	Ser									
			130			135									

&lt;210&gt; 2365

&lt;211&gt; 429

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2365

accggtgccc agctcccacg gctcgtccag acctacgttg agaaacttcg acgagacagt  
 60  
 ctccgtcagt tcgcccacaac acctctgaac gaagtcaaga ttctccggca ctggagccaa  
 120  
 ggtgcttgcc ctggcatgaa cgccccaggg gaggtcgacg ccgtcgggat tctcacaccg  
 180

atggtgatgg gactcggttt ccaaccacgg ttccatgtga cccagacagt tctggttggc  
 240  
 cccgagctcg atgcctcgtc cgcgacacag accatcgagc cacctcatgt cctccgccgt  
 300  
 caccgggctg cggtcggccc acacctctc ctcaccgagg taggcaaata ccgcttcacc  
 360  
 atagagctca aggtgattga gaccacaccg cgccatgacg cgcgtcagga aatcaagagt  
 420  
 ggaacgcgt  
 429

<210> 2366

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2366

Met	Ala	Arg	Cys	Gly	Leu	Asn	His	Leu	Glu	Leu	Tyr	Gly	Glu	Ala	Gly
1				5					10					15	
Phe	Ala	Tyr	Arg	Gly	Glu	Glu	Glu	Val	Trp	Ala	Asp	Arg	Ser	Pro	Val
			20					25					30		
Thr	Ala	Glu	Asp	Met	Arg	Trp	Leu	Asp	Gly	Leu	Cys	Arg	Gly	Arg	Gly
		35					40				45				
Ile	Glu	Leu	Gly	Ala	Asn	Gln	Asn	Cys	Leu	Gly	His	Met	Glu	Pro	Trp
	50					55				60					
Leu	Glu	Thr	Glu	Ser	His	His	His	Arg	Cys	Glu	Asn	Pro	Asp	Gly	Val
65					70					75				80	
Asp	Leu	Pro	Trp	Gly	Val	His	Ala	Arg	Ala	Ser	Thr	Leu	Ala	Pro	Val
				85					90					95	
Pro	Glu	Asn	Leu	Asp	Phe	Val	Gln	Arg	Leu	Leu	Gly	Glu	Leu	Thr	Glu
		100						105					110		
Thr	Val	Ser	Ser	Lys	Phe	Leu	Asn	Val	Gly	Leu	Asp	Glu	Pro	Trp	Glu
		115					120					125			
Leu	Gly	Thr	Gly												
															130

<210> 2367

<211> 474

<212> DNA

<213> Homo sapiens

<400> 2367

ngtgcacggg agaagacgtg cgcgacagttc ggcggaacct atccgggttc ggccggcagt  
 60  
 ggggggtcacg agctcaccga cgcgcgcgcg ttcgcctcgt ggggggtcga ttctgtcaaa  
 120  
 tacgatcggg gctccggtga ctccgcgcac gacgaccagg tcgcctcgtt caccgcgatg  
 180  
 cgtgacgcaa tccgatccac cggacgcccc atggtgtaca gcatcaaccc caacagcgaa  
 240  
 tcgccggatc ggtccggagc ccaattcgat tggggcggtg tggcaaccat gacacgtacc  
 300  
 accaaccgaca tctcgccggt gtggaccact cggccggccg gtgccgatgc gacaccggca  
 360



tcgggggtatc aggggatccg cgacatcatc gacgccgtgg ccccgatcgg cgcacggggt  
 420  
 gcgacggcag ctctgctgac atggacatgc tcgtcgtcgg tgctggcaac gcgt  
 474

<210> 2368  
 <211> 158  
 <212> PRT  
 <213> Homo sapiens

<400> 2368  
 Xaa Ala Arg Glu Lys Thr Cys Ala Gln Phe Gly Gly Thr Tyr Pro Gly  
 1 5 10 15  
 Ser Ala Gly Ser Gly Gly His Glu Leu Thr Asp Ala Arg Ala Phe Ala  
 20 25 30  
 Ser Trp Gly Val Asp Phe Val Lys Tyr Asp Arg Cys Ser Gly Asp Ser  
 35 40 45  
 Ala His Asp Asp Gln Val Ala Ser Phe Thr Ala Met Arg Asp Ala Ile  
 50 55 60  
 Arg Ser Thr Gly Arg Pro Met Val Tyr Ser Ile Asn Pro Asn Ser Glu  
 65 70 75 80  
 Ser Pro Asp Arg Ser Gly Ala Gln Phe Asp Trp Gly Gly Val Ala Thr  
 85 90 95  
 Met Thr Arg Thr Thr Asn Asp Ile Ser Pro Val Trp Thr Thr Arg Pro  
 100 105 110  
 Ala Gly Ala Asp Ala Thr Pro Ala Ser Gly Tyr Gln Gly Ile Arg Asp  
 115 120 125  
 Ile Ile Asp Ala Val Ala Pro Ile Gly Ala Arg Val Ala Thr Ala Ala  
 130 135 140  
 Ser Ser Thr Trp Thr Cys Ser Ser Ser Val Ser Ala Thr Arg  
 145 150 155

<210> 2369  
 <211> 408  
 <212> DNA  
 <213> Homo sapiens

<400> 2369  
 ctgaatggca ggcaggcaga ggccaccaga gccagcccc cgagaagccc tgctgagcca  
 60  
 aaggggagcg ccctgggacc taaccagag ccccatctca ccttcccccg ttctttcaaa  
 120  
 gtgcctcccc caacccagc caggacttcg tccatccag ttcaggaagc acaagaggct  
 180  
 cccgaaagga agagggggcc accaagaagg ctcccagccg actcccactg cctcccagct  
 240  
 tccacatccg ccccgctcc caggtctacc cagacagggc ccccgagcnc agactgcct  
 300  
 ggggagctca agggcacagc accagccagc ccaaggcttg gccagtccca gtcccaagca  
 360  
 gatgaacgag ctgggactcc gcctccagcc cctcccctgc cccctcct  
 408

<210> 2370

<211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 2370  
 Leu Asn Gly Arg Gln Ala Glu Ala Thr Arg Ala Ser Pro Pro Arg Ser  
 1 5 10 15  
 Pro Ala Glu Pro Lys Gly Ser Ala Leu Gly Pro Asn Pro Glu Pro His  
 20 25 30  
 Leu Thr Phe Pro Arg Ser Phe Lys Val Pro Pro Pro Thr Pro Val Arg  
 35 40 45  
 Thr Ser Ser Ile Pro Val Gln Glu Ala Gln Glu Ala Pro Glu Arg Lys  
 50 55 60  
 Arg Gly Pro Pro Arg Arg Leu Pro Ala Asp Ser His Cys Leu Pro Ala  
 65 70 75 80  
 Ser Thr Ser Ala Pro Pro Pro Arg Ser Thr Gln Thr Gly Pro Pro Ser  
 85 90 95  
 Xaa Asp Cys Pro Gly Glu Leu Lys Ala Thr Ala Pro Ala Ser Pro Arg  
 100 105 110  
 Leu Gly Gln Ser Gln Ser Gln Ala Asp Glu Arg Ala Gly Thr Pro Pro  
 115 120 125  
 Pro Ala Pro Pro Leu Pro Pro Pro  
 130 135

<210> 2371  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

<400> 2371  
 gaattcgggtg tgcgatgcga gcctgcagcc tgggagcaga gacaaggagc aaaggcgggtg  
 60  
 agaggggttgc cagggcaccc agttacagct ggagctgcag gggacccatc cctcgagaga  
 120  
 ggcaggcact agtcatgagg caagagatgc ctgagaagag gatgctggcc gcagggcaca  
 180  
 gcagagaggg agatagcccc gggcactcct caggaccggg cctcagggga cagcaaaca  
 240  
 gattcctgat agacgcgccc aggtcatgcc ttttcagtgg tgtgagccag gttctggcgt  
 300  
 caggcgggcc aaggttttca tgcagcn  
 327

<210> 2372  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 2372  
 Met Arg Ala Cys Ser Leu Gly Ala Glu Thr Arg Ser Lys Gly Gly Glu  
 1 5 10 15  
 Arg Val Ala Arg Ala Pro Ser Tyr Ser Trp Ser Cys Arg Gly Pro Ile  
 20 25 30  
 Pro Arg Glu Arg Gln Ala Leu Val Met Arg Gln Glu Met Pro Gln Lys

```

      35          40          45
Arg Met Leu Ala Ala Gly His Ser Arg Glu Gly Asp Ser Pro Gly His
      50          55          60
Ser Ser Gly Pro Gly Leu Arg Gly Gln Gln Thr Arg Phe Leu Ile Asp
      65          70          75          80
Ala Pro Arg Ser Cys Leu Phe Ser Gly Val Ser Gln Val Leu Ala Ser
      85          90          95
Gly Gly Pro Arg Phe Ser Cys Ser
      100

```

&lt;210&gt; 2373

&lt;211&gt; 591

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2373

```

gaattctgac attcaggaag tcaattgcag aagggtttaac caagttgatt ctgttttacc
60
aaatcctgtc tattctgaaa agcggccaat gccagactca tctcatgatg tgaaagttct
120
cacttcaaag acatcagctg ttgagatgac ccaggcagta ttgaatactc agctttcatc
180
agaaaatgtt accaaagtgt agcaaaattc accagcagtt tgtgaaacaa tttctgttcc
240
caagtccatg tccactgagg aatataaatc aaaaattcaa aatgaaaata tgctacttct
300
cgctttgctt tcacaggcac gtaagactca gaagacagta ttaaaagatg ctaatcaaac
360
tattcaggat tctaaaccag acagttgtga aatgaatcca aatacccaaa tgactggtaa
420
ccaactgaat ttgaagaaca tggaaactcc aagtacttct aatgtaagtg gcagggtttt
480
ggacaactcc ttttgcagtg gacaagaatc ctcaacaaaa ggaatgcctg ctaaaagtga
540
cagtagctgt tccatggaag tgctagcaac ctgtctttcc ctgtggaaaa a
591

```

&lt;210&gt; 2374

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2374

```

Met Pro Asp Ser Ser His Asp Val Lys Val Leu Thr Ser Lys Thr Ser
1          5          10          15
Ala Val Glu Met Thr Gln Ala Val Leu Asn Thr Gln Leu Ser Ser Glu
      20          25          30
Asn Val Thr Lys Val Glu Gln Asn Ser Pro Ala Val Cys Glu Thr Ile
      35          40          45
Ser Val Pro Lys Ser Met Ser Thr Glu Glu Tyr Lys Ser Lys Ile Gln
      50          55          60
Asn Glu Asn Met Leu Leu Ala Leu Leu Ser Gln Ala Arg Lys Thr
      65          70          75          80
Gln Lys Thr Val Leu Lys Asp Ala Asn Gln Thr Ile Gln Asp Ser Lys

```

```
<210> 2375
<211> 535
<212> DNA
<213> Homo sapiens
```

```
<210> 2376
<211> 178
<212> PRT
<213> Homo sapiens
```

1730

```

      85              90              95
Ser His Leu Phe Arg Gly Ala Thr Ser Gly Thr Ile Met Arg Asn Asp
      100              105              110
Ala Tyr Arg Phe Ile Arg Leu Gly Thr Phe Val Glu Arg Ala Asp Asn
      115              120              125
Thr Leu Arg Leu Leu Asp Ala Arg Tyr Glu Met Phe Gly Glu Glu Ser
      130              135              140
Glu Glu Val Ser Asp Leu Ser Ala Arg Gly Tyr Tyr Gln Trp Ser Ala
      145              150              155              160
Leu Leu Arg Ala Leu Ser Ser Phe Glu Ala Tyr Thr Glu Leu Tyr Pro
      165              170              175
Asn Ala

```

&lt;210&gt; 2377

&lt;211&gt; 622

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2377

```

acgcgtgaag ggttgaggct tcagaagtgg tagggaagaa cagaagctcc cttctgaggg
60
agcaccacagg agatgaaagg aaccaatcct ggggtggtcct gcaccagcct tatcaacccc
120
tgacagacaa atggaaaact tctgtgatgg tgggacatga aaaaatattt cacccttctg
180
ataaaaatgga accagcagat agaagtagga atttttctgt taggtgaaat gtttttaaaa
240
atatgtatac aggaaaaagc ataaaacagt attgactggc aaacatagaa ctggaatgta
300
aatataatgt tctttgccct gaatgattta agtggcatga taaaactcat gccacagact
360
gggtaagaca aggaatctaa tccactctaa aaagaagaaa agcatagtaa aattctcctt
420
agagtttaga ttattaatag ttctatctta ctatttaatt taatcatagt taatgatgag
480
aatttcttaa atttaaagct tctgatgatg ctaaatgtgc atttctcatg attccttaaa
540
acaatttttg taaattctat tcttaggacc ttctgctttc agaaaaatta atgtcttgta
600
ttcttcgtat tggaggagat ct
622

```

&lt;210&gt; 2378

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2378

```

Met Ser Phe Ile Met Pro Leu Lys Ser Phe Arg Ala Lys Asn Ile Ile
  1           5           10           15
Phe Thr Phe Gln Phe Tyr Val Cys Gln Ser Ile Leu Phe Tyr Ala Phe
      20           25           30
Ser Cys Ile His Ile Phe Lys Asn Ile Ser Pro Asn Arg Lys Ile Pro

```

```

      35              40              45
Thr Ser Ile Cys Trp Phe His Phe Ile Arg Arg Val Lys Tyr Phe Phe
  50              55              60
Met Ser His His His Arg Ser Phe Pro Phe Val Cys Gln Gly Leu Ile
  65              70              75              80
Ser Leu Val Gln Asp His Pro Gly Leu Val Pro Phe Ile Ser Trp Val
      85              90              95
Leu Pro Gln Lys Gly Ala Ser Val Leu Pro Tyr His Phe
      100              105

```

&lt;210&gt; 2379

&lt;211&gt; 342

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2379

```

tcatgacctg gagacttcgg aaactcaaca agactgcagg gcaccaggg gcaccagccc
60
cggtcaccgc agaggatcag tgcactttgc catctggcag atcaactcat ggcacaactg
120
ggaaacataa cattcacgct tgtgaaccga gacgccatac cccagcgggtg ccgagagcaa
180
cagtgtctgtg caggtctggg cagatgaggg cctccaggac acgaggactc actcgctcac
240
cctgcccact gggcagctgc tcgccactcc cctcctggag ggcaggacgg acaccacaca
300
cacacacaag caggaagct gtgcagcagt ggggagaaaag ca
342

```

&lt;210&gt; 2380

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2380

```

Met Thr Trp Arg Leu Arg Lys Leu Asn Lys Thr Ala Gly His Pro Gly
  1              5              10              15
Ala Pro Ala Pro Val Thr Ala Glu Asp Gln Cys Thr Leu Pro Ser Gly
      20              25              30
Arg Ser Thr His Gly Thr Thr Gly Lys His Asn Ile His Ala Cys Glu
      35              40              45
Pro Arg Arg His Thr Pro Ala Val Pro Arg Ala Thr Val Leu Cys Arg
      50              55              60
Ser Gly Gln Met Arg Ala Ser Arg Thr Arg Gly Leu Thr Arg Ser Pro
      65              70              75              80
Cys Pro Leu Gly Ser Cys Ser Pro Leu Pro Ser Trp Arg Ala Gly Arg
      85              90              95
Thr Pro His Thr His Thr Ser Arg Glu Ala Val Gln Gln Trp Gly Glu
      100              105              110
Ser

```

&lt;210&gt; 2381

&lt;211&gt; 434

<212> DNA  
 <213> Homo sapiens

<400> 2381  
 gtgcaccctg gccatatgga cgccagcgac gtcggcgctct tgcgtgacgt ggaaccgata  
 60  
 ggcccaagta gagagatgga ttttgaatgg tgacgatgta cccgccgcag caagtggatg  
 120  
 ccgtcctctt tgacatggac ggaaccctgc tcaacaccct gccggcctgg tgcgtggcat  
 180  
 ctgagcatct gtggggcact tctctggctg acgctgacag cgccaagggt gacgggggca  
 240  
 ccgtcgacga cgtcgttgag ctgtatctgc gagaccaccc tcaggcagat cccagggcca  
 300  
 ccacgagcgg ttatcatggac atccttgacg ccaacctggc tggccacacc gagccgatgc  
 360  
 ccggagctga ccgcctcgtg aagaggctgt caggctcatgt acccatcgct gtggtgtcga  
 420  
 attccccgac gcgt  
 434

<210> 2382  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 2382  
 Met Val Thr Met Tyr Pro Pro Gln Gln Val Asp Ala Val Leu Phe Asp  
 1 5 10 15  
 Met Asp Gly Thr Leu Leu Asn Thr Leu Pro Ala Trp Cys Val Ala Ser  
 20 25 30  
 Glu His Leu Trp Gly Thr Ser Leu Ala Asp Ala Asp Ser Ala Lys Val  
 35 40 45  
 Asp Gly Gly Thr Val Asp Asp Val Val Glu Leu Tyr Leu Arg Asp His  
 50 55 60  
 Pro Gln Ala Asp Pro Gln Ala Thr Ile Glu Arg Phe Met Asp Ile Leu  
 65 70 75 80  
 Asp Ala Asn Leu Ala Gly His Thr Glu Pro Met Pro Gly Ala Asp Arg  
 85 90 95  
 Leu Val Lys Arg Leu Ser Gly His Val Pro Ile Ala Val Val Ser Asn  
 100 105 110  
 Ser Pro Thr Arg  
 115

<210> 2383  
 <211> 393  
 <212> DNA  
 <213> Homo sapiens

<400> 2383  
 acgcgtgcgt tcagatgagc gccggacgaa actcctcggg cgcttcggca ggcattggatt  
 60  
 catgtcggca cgggcctttg aacaggatcg ccgtcgcgtg gctatccgcc gcgggtgggg  
 120

cagaaaacgc ccactctccc ttccccaggc gccggcgctc gagtcgtcta cgcaacgcac  
 180  
 gtctacatag gtgacttttt cataccccca ctttcgtact cggatgggct cggcgtgctc  
 240  
 gatgtcggca cgaaaaatta aatgcactga atgcgggttg tcgcacagga tgcattctct  
 300  
 ctttcttgat gccacccacc ttgttacata ttctgccatg caaaacacct tgtgattttt  
 360  
 gccggagtgc aacatgggtat gtgtatgccca ctg  
 393

<210> 2384

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2384

Met	Leu	His	Ser	Ala	Lys	Asn	His	Lys	Val	Phe	Cys	Met	Ala	Glu	Tyr
1			5						10					15	
Val	Thr	Arg	Trp	Val	Ala	Ser	Arg	Lys	Thr	Arg	Cys	Ile	Leu	Cys	Asp
			20					25					30		
Asn	Pro	His	Ser	Val	His	Leu	Ile	Phe	Arg	Ala	Asp	Ile	Glu	His	Ala
		35					40					45			
Glu	Pro	Ile	Arg	Val	Arg	Lys	Trp	Gly	Tyr	Glu	Lys	Val	Thr	Tyr	Val
	50					55					60				
Asp	Val	Arg	Cys	Val	Asp	Ser	Thr	Ala	Gly	Ala	Trp	Gly	Arg	Glu	
65					70				75					80	
Ser	Gly	Arg	Phe	Leu	Pro	His	Pro	Arg	Arg	Ile	Ala	Thr	Arg	Arg	Arg
			85					90					95		
Ser	Cys	Ser	Lys	Ala	Arg	Ala	Asp	Met	Asn	Pro	Cys	Leu	Pro	Lys	Arg
			100					105					110		
Pro	Arg	Ser	Phe	Val	Arg	Arg	Ser	Ser	Glu	Arg	Thr	Arg			
		115					120					125			

<210> 2385

<211> 347

<212> DNA

<213> Homo sapiens

<400> 2385

acgcgttccc aaagtaggat ggctgggata gagggaaagg acatctttca ggcttggtat  
 60  
 gcaactgtgct gtggactctt gttgtggggt cctaggtctg ccagcattt tggggttcac  
 120  
 cccgtgaccc tctacggggt tccatgcccc cagcaccacg tccatcatca tttctggggt  
 180  
 cccctcacct cagagagcct gcttcctatg actgcgtggg ccagctggag aaggacgacc  
 240  
 caagaccctt caagtttctg tgtcctgacc ccaagcatag gcctgagtgc tectggggcc  
 300  
 caagggcctt tacgcactac tctctggggc ccactgtctg cactctt  
 347

<210> 2386



<211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 2386  
 Met Ala Gly Ile Glu Gly Lys Asp Ile Phe Gln Ala Cys Tyr Ala Leu  
 1 5 10 15  
 Cys Cys Gly Leu Leu Trp Gly Pro Arg Ser Ala Gln His Phe Gly  
 20 25 30  
 Val His Pro Val Thr Leu Tyr Gly Phe Pro Cys Pro Gln His His Val  
 35 40 45  
 His His His Phe Trp Gly Pro Leu Thr Ser Glu Ser Leu Leu Pro Met  
 50 55 60  
 Thr Ala Trp Ala Ser Trp Arg Arg Thr Thr Gln Asp Pro Ser Ser Phe  
 65 70 75 80  
 Cys Val Leu Thr Pro Ser Ile Gly Leu Ser Ala Pro Gly Ala Gln Gly  
 85 90 95  
 Pro Leu Arg Thr Thr Leu Trp Gly Pro Leu Ser Ala Leu  
 100 105

<210> 2387  
 <211> 715  
 <212> DNA  
 <213> Homo sapiens

<400> 2387  
 ncggccgcac ttcaccttac ggaggggaga taatgagatc aattagaggc gccgtcaccg  
 60  
 cgccggagac agctgccgcc gcatagtaat caccgcggg ctgggtgcgc gggggctccc  
 120  
 cgctacctgc gcgcctgctg ctcccaccac gcggcaccga cccgggcgcg ccccgggccc  
 180  
 ctgtccgcag cccacagcca caccgcgcac cctacacct ccttgcgcct ctgctgggga  
 240  
 gctcaccccc tccactcgca cagtgcgctg cggcccgggg tgtgggaggt cccgggactt  
 300  
 gggttgtgag tgcctgtgtg ggggtagggg cagggtgtccg cttgtgcgca tatgggcatg  
 360  
 agtgtacatg gcgtgtgcct ggagatgggc gagtgcaggc tggaatgtgc cggcgtggca  
 420  
 cgtgtgtggg cccaaataga tgcgtgtgtg atcacatgtt gtgttcgtgt ttgcacctcg  
 480  
 tgtgcctgtg tgtccgtatt tgagtgtta caggaatgtg ggtggtagt acccgatatg  
 540  
 ggggtgcatct gcacttgtgc gtgtgtgtgt gtaggcgcgt gtgtgtgcgt gtgtgtgtta  
 600  
 ngggatacgt gtagatgtgc attagtgtga ctgtgtgtgc tcatgtgcct gtgcacgtgt  
 660  
 gtttgagggt tgtgtgcatg ggtagcgtct gtgagagcca tgtgtatatc tgcag  
 715

<210> 2388  
 <211> 58  
 <212> PRT

<213> Homo sapiens

<400> 2388

```
Met Gly Met Ser Val His Gly Val Cys Leu Glu Met Gly Glu Cys Arg
 1           5           10           15
Leu Glu Cys Ala Gly Val Ala Arg Val Trp Ala Gln Ile Asp Ala Cys
      20           25           30
Val Ile Thr Cys Cys Val Arg Val Cys Thr Ser Cys Ala Cys Val Ser
      35           40           45
Val Phe Glu Cys Leu Gln Glu Cys Gly Trp
      50           55
```

<210> 2389

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2389

```
ntcaccctgc cgccggaagg ttgctcgtag cgcattggcca tcgtcaccat gaagaagtcg
60
tatccggggcc acgccaagcg cgtcatgttg ggtgtctggt cgtttttgcg acagttcatg
120
tataccaagt tcgttatcgt caccgacgac gatataacg cccgcgactg gaacgacgtg
180
atctggggcca tcaccacgcg catggacccc aagcgcgaca cggatgatgat cgataaacag
240
ccgatcgact acctcgactt cgctcgccg gtgtccggcc tgggttcgaa gatggggctc
300
gatccacgac acaaatggcc cggccacacc acccg
336
```

<210> 2390

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2390

```
Xaa Thr Leu Pro Pro Glu Gly Cys Ser Tyr Arg Met Ala Ile Val Thr
 1           5           10           15
Met Lys Lys Ser Tyr Pro Gly His Ala Lys Arg Val Met Leu Gly Val
      20           25           30
Trp Ser Phe Leu Arg Gln Phe Met Tyr Thr Lys Phe Val Ile Val Thr
      35           40           45
Asp Asp Asp Ile Asn Ala Arg Asp Trp Asn Asp Val Ile Trp Ala Ile
      50           55           60
Thr Thr Arg Met Asp Pro Lys Arg Asp Thr Val Met Ile Asp Asn Thr
      65           70           75           80
Pro Ile Asp Tyr Leu Asp Phe Ala Ser Pro Val Ser Gly Leu Gly Ser
      85           90           95
Lys Met Gly Leu Asp Pro Thr His Lys Trp Pro Gly His Thr Thr Arg
      100           105           110
```

<210> 2391

<211> 388

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2391

gtcgactaac ctgcgtacag ccgccaccct acgttttagtc gcgaagcgtg tcgggtccat  
 60  
 gttcattccg gagctacacc atgaataaag tactacctga tccacccatc gatcccgcga  
 120  
 aagaccgcgt cgctttcaac cgcgccatcg accattacct gcctaccag ggcttcact  
 180  
 gcgtcaacga agacctgagt ttcgaagacg ccctgctcta caccgccagc ctgctcgaca  
 240  
 gtgcctctgc caccggcgtg gattgcggtg agctgctgca aagccctgaa cgggcgaaga  
 300  
 tcctggcgtg gtggcatttg ctggaaattg caaaaaccac cgtagatcgc ttcccatcgc  
 360  
 agtgcctgac cgcaccaaag ccctgcct  
 388

&lt;210&gt; 2392

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2392

Met	Asn	Lys	Val	Leu	Pro	Asp	Pro	Pro	Ile	Asp	Pro	Ala	Lys	Asp	Arg
1				5					10					15	
Val	Ala	Phe	Asn	Arg	Ala	Ile	Asp	His	Tyr	Leu	Pro	Thr	Gln	Gly	Phe
			20					25					30		
His	Cys	Val	Asn	Glu	Asp	Leu	Ser	Phe	Glu	Asp	Ala	Leu	Leu	Tyr	Thr
		35					40					45			
Ala	Ser	Leu	Leu	Asp	Ser	Ala	Ser	Ala	Thr	Ala	Leu	Asp	Cys	Gly	Glu
	50					55				60					
Leu	Leu	Gln	Ser	Pro	Glu	Arg	Ala	Lys	Ile	Leu	Ala	Val	Trp	His	Leu
65				70					75					80	
Leu	Glu	Ile	Ala	Lys	Thr	Thr	Val	Asp	Arg	Phe	Pro	Ile	Glu	Cys	Leu
			85					90						95	
Thr	Ala	Pro	Lys	Pro	Cys										
				100											

&lt;210&gt; 2393

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2393

aacctgtcta ccgaggacca ggccgagcag gtagagattg tgaagcgctc tgagtcgggc  
 60  
 atgggtcaccg accccatcac tgcgcgcccg gatatgacca tcggggaagt agacgcgctg  
 120  
 tgcgcccgtc tccgcatctc cggcctgccg gtggtagacg aggacggcac cctgatgggc  
 180  
 atttgacca cccgcgatat gcgcttcgag cctgactttg accgcaaggt cagcgaggtc  
 240

atgacggcta tgccgcttgt tgttgcgcg gcgaggtgtat ctaagaagga agccctcgaa  
 300  
 ctgctctcgg ccaataaggt ggaaaagctg cccatcgctg atgcggataa taagctcacc  
 360  
 ggccctgatta ccgtcaagga ctttgtcaag accgagcagt accccaacgc g  
 411

<210> 2394

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2394

Asn	Leu	Ser	Thr	Glu	Asp	Gln	Ala	Glu	Gln	Val	Glu	Ile	Val	Lys	Arg
1				5				10						15	
Ser	Glu	Ser	Gly	Met	Val	Thr	Asp	Pro	Ile	Thr	Ala	Arg	Pro	Asp	Met
			20					25					30		
Thr	Ile	Gly	Glu	Val	Asp	Ala	Leu	Cys	Ala	Arg	Phe	Arg	Ile	Ser	Gly
		35					40					45			
Leu	Pro	Val	Val	Asp	Glu	Asp	Gly	Thr	Leu	Met	Gly	Ile	Cys	Thr	Thr
		50				55					60				
Arg	Asp	Met	Arg	Phe	Glu	Pro	Asp	Phe	Asp	Arg	Lys	Val	Ser	Glu	Val
65					70				75					80	
Met	Thr	Ala	Met	Pro	Leu	Val	Val	Ala	Arg	Glu	Gly	Val	Ser	Lys	Lys
			85						90					95	
Glu	Ala	Leu	Glu	Leu	Leu	Ser	Ala	Asn	Lys	Val	Glu	Lys	Leu	Pro	Ile
			100					105					110		
Val	Asp	Ala	Asp	Asn	Lys	Leu	Thr	Gly	Leu	Ile	Thr	Val	Lys	Asp	Phe
		115					120					125			
Val	Lys	Thr	Glu	Gln	Tyr	Pro	Asn	Ala							
		130					135								

<210> 2395

<211> 362

<212> DNA

<213> Homo sapiens

<400> 2395

aagctttcag aggagtttgc taaagtgtta aggatttgca tattttcaac tttagtcata  
 60  
 tctaagtgcc ccaataaaac agcgcggcgc attgggggct ggctttcatc aacaactaac  
 120  
 ttagcaatat taatctgacc ttttctggt gattgggcat ttagtaataa tgcggggcca  
 180  
 atatcatcat actttccaaa ttttttgat tttttagaca tcaactgaag ttgtgaccat  
 240  
 ttactgtctt tgtcttgatg gcaatctaaa caaacatctc ttgtattaag ttgttcactt  
 300  
 acccaaggat taggcactct aaaggcatga tcgcgtcgat catcgactcc catgtaacgc  
 360  
 gt  
 362

<210> 2396

<211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 2396  
 Met Gly Val Asp Asp Arg Arg Asp His Ala Phe Arg Val Pro Asn Pro  
 1 5 10 15  
 Trp Val Ser Glu Gln Leu Asn Thr Arg Asp Val Cys Leu Asp Cys His  
 20 25 30  
 Gln Asp Lys Asp Ser Lys Trp Ser Gln Leu Gln Leu Met Ser Lys Lys  
 35 40 45  
 Ser Lys Ile Phe Gly Lys Tyr Asp Asp Ile Gly Pro Ala Leu Leu Leu  
 50 55 60  
 Asn Ala Gln Ser Pro Gly Lys Gly Gln Ile Asn Ile Ala Lys Leu Val  
 65 70 75 80  
 Val Asp Glu Ser Gln Pro Pro Met Arg Arg Ala Val Leu Leu Gly His  
 85 90 95  
 Leu Asp Met Thr Lys Val Glu Asn Met Gln Ile Leu Asn Thr Leu Ala  
 100 105 110  
 Asn Ser Ser Ser Glu Ser  
 115

<210> 2397  
 <211> 449  
 <212> DNA  
 <213> Homo sapiens

<400> 2397  
 nacagcacac tccgctcctc ccgacgatca tagctttcac gtcggacatg atcccccgcc  
 60  
 tagtgacta ctggctcttc tccgtccctc cctacgggga ccacacttcc tacaccatgg  
 120  
 aagggtacat caacaacact ctctccatct tcaaagtcgc agacttcaaa aacaaaagca  
 180  
 agggaaaccc gtactctgac ctgggtaacc ataccacatg caggtatcgt gatttccgat  
 240  
 acccacctgg acacccccag gagtataaac acaacatcta ctattggcat gtgattgcag  
 300  
 ccaagctggc ttttatcatt gtcattggagc acgtcatcta ctctgtgaaa tttttcattt  
 360  
 catatgcaat tcccgatgta tcaaagcgca caaagagcaa gatccagaga gaaaaatacc  
 420  
 taacccaaaa gcttcttcat gagaatcac  
 449

<210> 2398  
 <211> 76  
 <212> PRT  
 <213> Homo sapiens

<400> 2398  
 Cys Thr Thr Gly Pro Ser Pro Ser Leu Pro Thr Gly Thr Thr Leu Pro  
 1 5 10 15  
 Thr Pro Trp Lys Gly Thr Ser Thr Thr Leu Ser Pro Ser Ser Lys Ser

```

          20          25          30
Gln Thr Ser Lys Thr Lys Ala Arg Glu Thr Arg Thr Leu Thr Trp Val
          35          40          45
Thr Ile Pro His Ala Gly Ile Val Ile Ser Asp Thr His Leu Asp Thr
          50          55          60
Pro Arg Ser Ile Asn Thr Thr Ser Thr Ile Gly Met
65          70          75

```

<210> 2399  
 <211> 344  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2399
acgcgtcatg cttcacgaaa cgggtcacgc gcttcattac caagcagctg gcaaacacaa
60
cttgatatttc gagcgggttg cgccagtcga gatcatggag ttcgtggcct actgcttgca
120
gtttctgacg atcgagcgcc tggccatgtc aggggaactt tcgggtaaag aacaggaact
180
agtcaaacc tttgctggtc cgccaggct tggaggggtt cgaaaaccta caacgccaca
240
aaacggttcc agcactgggt ttataaacag cctaaaatcc cgacaagtaa agaactcgat
300
accgtatggc ttgagatgcg acacacgctc ggggtggatt ggctc
344

```

<210> 2400  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2400
Met Leu His Glu Thr Gly His Ala Leu His Tyr Gln Ala Ala Gly Lys
1          5          10          15
His Asn Leu Tyr Phe Glu Arg Val Ala Pro Val Glu Ile Met Glu Phe
20          25          30
Val Ala Tyr Cys Leu Gln Phe Leu Thr Ile Glu Arg Leu Ala Met Ser
35          40          45
Gly Glu Leu Ser Gly Lys Glu Gln Glu Leu Val Lys Pro Phe Ala Gly
50          55          60
Pro Ala Arg Leu Gly Gly Val Arg Lys Pro Thr Thr Pro Gln Asn Gly
65          70          75          80
Ser Ser Thr Gly Phe Ile Asn Ser Leu Lys Ser Arg Gln Val Lys Asn
85          90          95
Ser Ile Pro Tyr Gly Leu Arg Cys Asp Thr Arg Ser Gly Trp Ile Gly
100          105          110

```

<210> 2401  
 <211> 479  
 <212> DNA  
 <213> Homo sapiens

<400> 2401

nntaccgagg taaaactcga tagcctcggg gtcaccgacc agatgcgctc tgggcgctgc  
 60  
 tggatgtttg ccgcgctcaa cgtattccgc caccgcgcgg ccaaggagct caacatcgat  
 120  
 gactttgagt tttcctttac ctacctgcag tacttcgaca aactagagcg cgccaacttc  
 180  
 gcgctcaacc aactgctgga tctcaccgaa gacggcaccg actgggatga ccgcgacgtg  
 240  
 gctacttccc tcgagctcac aggcgacgac ggcggtggtg ggtcattttt caccaacctc  
 300  
 gtggacaagt acggcgagct cccggccgag gtcatgcctg aggtgcactc gtccggccac  
 360  
 accgaccaga tgaatcgga tategccacc atcatccgcc gcgccgcgca ccgtgcggtg  
 420  
 gaaggcgagg gggatcgagg gggcatcgtc aagcaagccc gccccgatat ccaacgcgt  
 479

<210> 2402

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2402

Xaa	Thr	Glu	Val	Lys	Leu	Asp	Ser	Leu	Gly	Val	Thr	Asp	Gln	Met	Arg
1				5					10					15	
Ser	Gly	Arg	Cys	Trp	Met	Phe	Ala	Ala	Leu	Asn	Val	Phe	Arg	His	Arg
			20					25					30		
Ala	Ala	Lys	Glu	Leu	Asn	Ile	Asp	Asp	Phe	Glu	Phe	Ser	Phe	Thr	Tyr
		35				40						45			
Leu	Gln	Tyr	Phe	Asp	Lys	Leu	Glu	Arg	Ala	Asn	Phe	Ala	Leu	Asn	Gln
	50					55					60				
Leu	Leu	Asp	Leu	Thr	Glu	Asp	Gly	Thr	Asp	Trp	Asp	Asp	Arg	Asp	Val
65					70					75				80	
Ala	Thr	Ser	Leu	Glu	Leu	Thr	Gly	Asp	Asp	Gly	Gly	Trp	Trp	Ser	Phe
			85					90						95	
Phe	Thr	Asn	Leu	Val	Asp	Lys	Tyr	Gly	Ala	Val	Pro	Ala	Glu	Val	Met
		100						105					110		
Pro	Glu	Val	His	Ser	Ser	Gly	His	Thr	Asp	Gln	Met	Asn	Arg	Asp	Ile
		115					120					125			
Ala	Thr	Ile	Ile	Arg	Arg	Ala	Ala	His	Arg	Ala	Val	Glu	Gly	Glu	Gly
	130					135					140				
Asp	Arg	Gly	Gly	Ile	Val	Lys	Gln	Ala	Arg	Pro	Asp	Ile	Gln	Arg	
145					150					155					

<210> 2403

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2403

ntcataaacg gcgataaccc gctggactcg tctgcggttc acccggaagc ctaccgctg  
 60  
 gtgcagcgta ttgccgccga gaccggccgt gatatccgtt cgctgatcgg tgacgcgcg  
 120

ttccctcaagc gcctggaccc gaagaagtac accgacgaaa ccttcggtgt gccgaccatc  
 180  
 accgacatcc tgcaagagct ggaaaaacct ggccgcgacc cgcgtcccga gttcaagacc  
 240  
 gccgagttcc aggacggtgt tgaagacctc aaggacctgc agccgggcat gatcctcgaa  
 300  
 ggcggtgtca ccaacgtgac caactttggc gcctttgtgg atatcggcgt gcatcaggac  
 360  
 ggtttggtgc acatctctgc acttttcg  
 387

<210> 2404

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2404

Xaa	Met	Asn	Gly	Asp	Asn	Pro	Leu	Asp	Ser	Ser	Ala	Val	His	Pro	Glu
1			5					10					15		
Ala	Tyr	Pro	Leu	Val	Gln	Arg	Ile	Ala	Ala	Glu	Thr	Gly	Arg	Asp	Ile
		20						25					30		
Arg	Ser	Leu	Ile	Gly	Asp	Ala	Ala	Phe	Leu	Lys	Arg	Leu	Asp	Pro	Lys
		35					40					45			
Lys	Tyr	Thr	Asp	Glu	Thr	Phe	Gly	Val	Pro	Thr	Ile	Thr	Asp	Ile	Leu
	50					55				60					
Gln	Glu	Leu	Glu	Lys	Pro	Gly	Arg	Asp	Pro	Arg	Pro	Glu	Phe	Lys	Thr
65					70				75					80	
Ala	Glu	Phe	Gln	Asp	Gly	Val	Glu	Asp	Leu	Lys	Asp	Leu	Gln	Pro	Gly
			85						90				95		
Met	Ile	Leu	Glu	Gly	Val	Val	Thr	Asn	Val	Thr	Asn	Phe	Gly	Ala	Phe
		100						105					110		
Val	Asp	Ile	Gly	Val	His	Gln	Asp	Gly	Leu	Val	His	Ile	Ser	Ala	Leu
		115					120					125			
Ser															

<210> 2405

<211> 859

<212> DNA

<213> Homo sapiens

<400> 2405

ttgcaagtaa catcaaaagt catctacaga agcaaaagac aaaaaggccc ctccacctgc  
 60  
 aaattaaatg gaataatttg ctttatgaga agctcaccat tggggtcatt cttatttttt  
 120  
 ctactccac atttcactac aaaccaagga aagctccctc atggaccgac atctgggtgag  
 180  
 ccttcacttc tcccctggca atgcctggcc acctgacacc tggcctccct cctctttcca  
 240  
 gcaatcctgg taccaacgaa tggctcacca ccaccaccc caatgccag accgcagacc  
 300  
 tgcattctc ccatctcaca gccccaaatc caaacggtta ttcattctac ctccatcct  
 360



actcttcacg aattttctcc accgtagact ctggttaatt ggactgactg aagcccaggg  
 420  
 gtcagtttct gtcctaagag cgctccaggt ggctgcaccc tgtgcccaga gccaggcccc  
 480  
 ctgctatagg ctgcgtgcac tccccctgca ggtgctgggg acaccgcaac cctcctcctg  
 540  
 gggacacctt ctgtcctttg caggccctcg ggggtcactt ctcccaggaa gccgcctctg  
 600  
 ggtgaggtaa tatccctcta tcacagcatt ggccacacca cattgcaaac gctgctgggg  
 660  
 tccactgtct tcaccaatta caccatgagc tccacagact ccaggaccat ggcttctacc  
 720  
 tctcagttcc cagtgtctagc tatggggccc agcacacagg gaacagcagt tcaattaccc  
 780  
 agttcactga agggcagacc tgggatcata caggggagcaa ggaagcttga gccccttcag  
 840  
 gagaagggga agaacgcgt  
 859

<210> 2406

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2406

Met	Asp	Arg	His	Leu	Val	Ser	Leu	His	Leu	Ser	Pro	Gly	Asn	Ala	Trp
1			5					10					15		
Pro	Pro	Asp	Thr	Trp	Pro	Pro	Ser	Ser	Phe	Gln	Gln	Ser	Trp	Tyr	Gln
		20					25					30			
Arg	Met	Ala	His	His	His	Pro	Pro	Gln	Cys	Pro	Asp	Arg	Arg	Pro	Ala
		35					40				45				
Phe	Leu	Pro	Ser	His	Ser	Pro	Lys	Ser	Lys	Pro	Leu	Phe	Ile	Leu	Pro
	50					55				60					
Pro	Ile	Leu	Leu	Leu	Thr	Asn	Phe	Phe	His	Arg	Arg	Leu	Trp	Leu	Ile
65					70				75					80	
Gly	Leu	Thr	Glu	Ala	Gln	Gly	Ser	Val	Ser	Val	Leu	Arg	Ala	Leu	Gln
			85				90					95			
Val	Ala	Ala	Pro	Cys	Ala	Gln	Ser	Gln	Ala	Pro	Cys	Tyr	Arg	Leu	Ala
			100				105				110				
Ala	Leu	Pro	Leu	Gln	Val	Leu	Gly	Thr	Pro	Gln	Pro	Ser	Ser	Trp	Gly
		115					120				125				
His	Leu	Leu	Ala	Phe	Ala	Gly	Pro	Arg	Gly	Ser	Leu	Leu	Pro	Gly	Ser
	130					135					140				
Arg	Leu	Trp	Val	Arg											
145															

<210> 2407

<211> 303

<212> DNA

<213> Homo sapiens

<400> 2407

nacgcgtggc ttatcttcag catgggtgatc gcgattgggt tagccgttat ggctgcggtc  
 60

gtattcatcg agcaaggcca gcgacgtatc ccggtgcagt acgccaagcg gatggtgggg  
 120  
 cgccgaatgt ttggtggctc gacgacgtac attccgctca aggtaaacca atctggcggt  
 180  
 atcccggtca tctttgcctc gtcgacctcg taccttcggg tgctctacgc aactttccgg  
 240  
 ccgcagacgt ccgcggcaaa gtggatcggt cactacttca cgcgcggtga ccattccggtg  
 300  
 tac  
 303

<210> 2408  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 2408  
 Xaa Ala Trp Phe Ile Phe Ser Met Val Ile Ala Ile Gly Leu Ala Val  
 1 5 10 15  
 Met Ala Ala Val Val Phe Ile Glu Gln Gly Gln Arg Arg Ile Pro Val  
 20 25 30  
 Gln Tyr Ala Lys Arg Met Val Gly Arg Arg Met Phe Gly Gly Ser Thr  
 35 40 45  
 Thr Tyr Ile Pro Leu Lys Val Asn Gln Ser Gly Val Ile Pro Val Ile  
 50 55 60  
 Phe Ala Ser Ser Ile Leu Tyr Leu Pro Val Leu Tyr Ala Thr Phe Arg  
 65 70 75 80  
 Pro Gln Thr Ser Ala Ala Lys Trp Ile Gly His Tyr Phe Thr Arg Gly  
 85 90 95  
 Asp His Pro Val Tyr  
 100

<210> 2409  
 <211> 322  
 <212> DNA  
 <213> Homo sapiens

<400> 2409  
 ccatggtttc aagccccat tgtgtcagcc cagagagcaa ctggagaccc tctgacacca  
 60  
 cctcccggcc caacaggagg ggaagccgaa attcagattg tggaaactgc ctacaatttt  
 120  
 cttccggcca aatgaccctc cctaggctac caagaccctg gcctaagggg agccgaggtc  
 180  
 tcggcccgac tgcagacgcc cgcaccctga ctccagatgc ctccgaggca tccaggtggg  
 240  
 ccctgagggg cctgctgtgg ctttgttctt gttggctggg ctgggggtct gacctggtga  
 300  
 gggacatgag tgtcagtggt gg  
 322

<210> 2410  
 <211> 106  
 <212> PRT

<213> Homo sapiens

<400> 2410

```

Met Val Ser Ser Pro His Cys Val Ser Pro Glu Ser Asn Trp Arg Pro
 1           5           10           15
Ser Asp Thr Thr Ser Arg Pro Asn Arg Arg Gly Ser Arg Asn Ser Asp
      20           25           30
Cys Gly Asn Cys Leu Gln Phe Ser Ser Gly Gln Met Thr Leu Pro Arg
      35           40           45
Leu Pro Arg Pro Trp Pro Lys Gly Ser Arg Gly Leu Gly Pro Thr Ala
      50           55           60
Asp Ala Arg Thr Leu Thr Pro Asp Ala Ser Glu Ala Ser Arg Trp Ala
65           70           75           80
Leu Arg Gly Leu Leu Trp Leu Cys Ser Cys Trp Leu Gly Trp Gly Ser
      85           90           95
Asp Leu Val Arg Asp Met Ser Val Ser Val
      100           105

```

<210> 2411

<211> 371

<212> DNA

<213> Homo sapiens

<400> 2411

```

ccatgggctg ggtgctggag acacgagatc aggcaggccc tgcccctggg gctcattcta
60
gggtctgcgg cagacagggga gacagagggga gctgtgagag ccctgaggct gagggtcttt
120
ctggggaagc accatcccta gggacctccg cggtcgggtca gtggccgctg ctgtcggtgt
180
gcagagcaga ggctggggcg agagtgggtca gcaggcctgc tgggtggcagc ttgtgcagga
240
agggaggatg gaggttggct tgtggctggc aagaggggtgg catgcacgtc gctgaaaggg
300
aggcctgggc ccgaggcctg ggtgtgggga cgcctgagga gactgtacag tgtggagtcg
360
gggggggctgc g
371

```

<210> 2412

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2412

```

Met Gly Trp Val Leu Glu Thr Arg Asp Gln Ala Gly Pro Ala Pro Gly
 1           5           10           15
Ala His Ser Arg Val Cys Gly Arg Gln Gly Asp Arg Gly Ser Cys Glu
      20           25           30
Ser Pro Glu Ala Glu Trp Leu Ser Gly Glu Ala Pro Ser Leu Gly Thr
      35           40           45
Ser Ala Phe Gly Gln Trp Pro Leu Leu Ser Val Cys Arg Ala Glu Ala
      50           55           60
Gly Ala Arg Val Val Ser Arg Pro Ala Gly Gly Ser Leu Cys Arg Lys

```

65                      70                      75                      80  
 Gly Gly Trp Arg Leu Ala Cys Gly Trp Gln Glu Gly Gly Met His Val  
                                  85                      90                      95  
 Ala Glu Arg Gln Ala Trp Ala Arg Gly Leu Gly Val Gly Thr Pro Glu  
                                  100                      105                      110  
 Glu Thr Val Gln Cys Gly Val Gly Gly Ala Ala  
                                  115                      120

<210> 2413  
 <211> 784  
 <212> DNA  
 <213> Homo sapiens

<400> 2413  
 cccgggagag ttgggcgggg caggggtggt catggcatac tcgggattgt gtcatttggt  
 60  
 gtggctggat ttaggggtgca tataaaggca gtgaggctgg agaagtattc taggtctgct  
 120  
 taggtctact gaggaattgg gggtcttctc gaagagcatg gagcccttgg aggacctcca  
 180  
 cagcaggcag agagacggca gcctcctggg atctgattgc ccagccccac ttacacaggt  
 240  
 ggctgaggtg agctcttccc atggagtgca tccttctctga tcagcctgag gagagcaggg  
 300  
 ccccaccatc ctgcacctgg tgcagaaaaa ccctgtgaag ctgcactaca gaaagacacc  
 360  
 accaggtggc aggcctggag attgcatgga ggccccgccc ccccaccca attctttgat  
 420  
 aatagcacag tgttgaagag agggggccat aaaagactga atccctgttc atgccaggct  
 480  
 ggctctgccc aacatatatg agactgcaag ttctgccact gtgggctgtg taccacaag  
 540  
 ccacaggtcc ctctgaacct gtgaatcagg tcttgggagc tattcgagca ggctggattt  
 600  
 tctcctctgc ctccggggac ctgagagtaa gttacagact tcatgacct tcaccccaaa  
 660  
 acacttgagt atgtatcacc taagaacaag ggcattctcc tgtagaacca caatgcaatt  
 720  
 tgcaagttca ggaaatttaa ctgatacaat actattatct aattacggag agaagacaac  
 780  
 gcgt  
 784

<210> 2414  
 <211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 2414  
 Met Lys Ser Val Thr Tyr Ser Gln Val Pro Arg Gly Arg Gly Glu Asn  
 1                      5                      10                      15  
 Pro Ala Cys Ser Asn Ser Ser Gln Asp Leu Ile His Arg Phe Arg Gly  
 20                      25                      30  
 Thr Cys Gly Leu Trp Val His Ser Pro Gln Trp Gln Asn Leu Gln Ser

[illegible]

```
<210> 2415
<211> 2164
<212> DNA
<213> Homo sapiens
```

<400> 2415					
ctcgtgccag	cgctcctcgcg	ggtctgaatg	gaagggtcga	ggtcgtcgtc	ggcggcgagc
60					
agatcctgaa	gccagaactc	caccccggcg	cccgcgccat	gcggcgggag	aggtgcggcg
120					
ccccccacc	gcgtcgccgc	catggagggtg	ctgcggcgct	cttcggtctt	cgctgcggag
180					
atcatggacg	cctttgatcg	ctggcccaca	gacaaggagc	tgggtggccca	ggctaaagca
240					
ctaggccggg	agtacgtgca	cgcgcggctt	ttgcgcgcgc	gcctctcctg	gagcgctcca
300					
gagcgtgcct	cgcctgcccc	tggaggacgc	ctggctgagg	tgtgcgcggt	gctgctgcgc
360					
ctgggcgatg	agctggagat	gatccggccc	agcgtctacc	gcaacgtggc	gcgtcacgtg
420					
cacatctccc	tgcagtctga	gcctgtgggtg	accgatgcgt	tcctggccgt	ggctggccac
480					
atcttctctg	caggcatcac	gtggggcaag	gtggtgtccc	tgtatgcggt	ggccgcgggg
540					
ctggccgtgg	actgtgtgag	gcaggccccag	cctgccatgg	tccacgccct	cgtaggactgc
600					
ctggggggagt	tcgtgcgcaa	gaccctggca	acctggctgc	ggagacgcgg	cggatggact
660					
gatgtcctca	agtgtgtggt	cagcacagac	cctggccctc	gctccactg	gctggtggct
720					
gcactctgca	gcttcggccg	cttctgtaag	gctgccttct	tcgtgctgct	gccagagaga
780					
tgagctgccc	acctggcagt	ggccgcagcc	tggccctctg	ggcccaacgc	aggaggccct
840					
cagcacccga	acacatcttc	ctctcccca	cccagacctg	gagcaactcta	acctcggaga
900					
ccccctaagc	cccgttcttc	cgcagaccca	ggccctccgg	aagggtgagt	ggggaggggc
960					
tttcttgagc	ctggagctgg	gctttggggc	agcctgcgac	cctccccgct	tgtgtccctt
1020					

ctctgtgat ctctgtgttt tcccttttct ttctggggcc aggaagtcag ggtcaactcc  
 1080  
 caggcctcag gtgaaggggc ccagaacacc tgctctcacc tgagccccag gtgaaggggc  
 1140  
 ccgggaacac ctgctctcac ctgagcccca ggtgaagggg cccgggaaca cctgctctca  
 1200  
 cctgagcccc tggtaagggg gcccgaaca cctgctctca cctgagcccc aggtgaaggg  
 1260  
 gcccgaaca cctgctctca cctgagcccc aggtgaaggg gcccgaaca cttgctctca  
 1320  
 cctgagcccc aggtgaaggg gcccgggaac acctctcacc tgaaccggg ggtcccatcc  
 1380  
 caggaagaag ggccatctca ggacatgagt cctcaggggc cctgcacatt caatctgaag  
 1440  
 gtgaccctgg cctggctgaa gctggaagag ctgtggggac tcagcctgta aacagagcgt  
 1500  
 aagggtcaca tgctgggtgc ttaatccgtt tctggaggaa gagtatgaca cccacttggt  
 1560  
 atggggtcct tgtgcggtgg ggaccggggc cggcgggctc caggccagca cacctaacc  
 1620  
 atggatgtgg aacctacggc cgagaaggaa tgttgcatga gtcggatccc agtccattgt  
 1680  
 cagtggaggg tgagggtgac cccatctgct atttttgtgc tcatcctcat acaaccattt  
 1740  
 ggggatgtgc ctattagggc tccgtaagaa ctcatgccc tgggaagccc agccccctcag  
 1800  
 gtgccccac acacagcctt cccttgacgc ctacatttct aggcacatgt gaggcattct  
 1860  
 tcctggagcc ccgagccagc cctgtccctc cccagtgcag catggcactc aggagataca  
 1920  
 ggctggacat ggggcagtcg ttctggggag gcctggccta gcagccaccc acctgagccc  
 1980  
 tcccggccag gcttcgtgct ggggtggggc atgtgccagg acaggagggt cccggcggaa  
 2040  
 agccagcccc ggactcatcg tgacattgag atccactgg agggtagggg tggtataaaa  
 2100  
 cttctccaaa cgataaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
 2160  
 aaaa  
 2164

<210> 2416

<211> 213

<212> PRT

<213> Homo sapiens

<400> 2416

Met	Glu	Val	Leu	Arg	Arg	Ser	Ser	Val	Phe	Ala	Ala	Glu	Ile	Met	Asp
1			5					10					15		
Ala	Phe	Asp	Arg	Trp	Pro	Thr	Asp	Lys	Glu	Leu	Val	Ala	Gln	Ala	Lys
		20					25					30			
Ala	Leu	Gly	Arg	Glu	Tyr	Val	His	Ala	Arg	Leu	Leu	Arg	Ala	Gly	Leu
	35					40					45				
Ser	Trp	Ser	Ala	Pro	Glu	Arg	Ala	Ser	Pro	Ala	Pro	Gly	Gly	Arg	Leu

```

      50              55              60
Ala Glu Val Cys Ala Val Leu Leu Arg Leu Gly Asp Glu Leu Glu Met
65              70              75              80
Ile Arg Pro Ser Val Tyr Arg Asn Val Ala Arg Gln Leu His Ile Ser
      85              90              95
Leu Gln Ser Glu Pro Val Val Thr Asp Ala Phe Leu Ala Val Ala Gly
      100             105             110
His Ile Phe Ser Ala Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr
      115             120             125
Ala Val Ala Ala Gly Leu Ala Val Asp Cys Val Arg Gln Ala Gln Pro
      130             135             140
Ala Met Val His Ala Leu Val Asp Cys Leu Gly Glu Phe Val Arg Lys
145             150             155             160
Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly Trp Thr Asp Val Leu
      165             170             175
Lys Cys Val Val Ser Thr Asp Pro Gly Leu Arg Ser His Trp Leu Val
      180             185             190
Ala Ala Leu Cys Ser Phe Gly Arg Phe Leu Lys Ala Ala Phe Phe Val
      195             200             205
Leu Leu Pro Glu Arg
      210

```

<210> 2417  
 <211> 615  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2417
nnagatcttt ggaatgggca gaactactaa atacagttaa tgcaccaaca agggtaagta
60
aagctgattt gattttcata ttgatacttc aatagttaag tgaaggacta gttattgctc
120
cagttggttag ttttcacact ttaaaaaagg ctttcaatta taaaatcttt ctccattatt
180
acgttttttc acaactgtga tccacgccac agttgcaaat aatcaacata gaaaaattaa
240
ataacataat tgatgaaaag ttagtttttc acaaaaatac gaaaaatttc atcacctaga
300
gaggaaaatg ttatgacaac ctatttcgat aaaattgaaa aaatctcctt tgaggggagaa
360
aaatccacaa atcctttttgc tttcaaacat tatgatgcta atcaagtaat tttaggtaaa
420
actatggctg aacattttacg cttaacgggtg tgttattggc ataccttttg ctggaatggg
480
aatgatatgt ttgggctagg ttctttggaa cgaagtgggc agaaaaattc aaatttgctt
540
gctggcgcag aacaaaaagc cgatattgct tttgagtttt tgaataagtt aggcgtgcct
600
tattattggt ttcac
615

```

<210> 2418  
 <211> 101  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2418

```

Met Thr Thr Tyr Phe Asp Lys Ile Glu Lys Ile Ser Phe Glu Gly Glu
 1           5           10           15
Lys Ser Thr Asn Pro Phe Ala Phe Lys His Tyr Asp Ala Asn Gln Val
          20           25           30
Ile Leu Gly Lys Thr Met Ala Glu His Leu Arg Leu Thr Val Cys Tyr
          35           40           45
Trp His Thr Phe Cys Trp Asn Gly Asn Asp Met Phe Gly Leu Gly Ser
          50           55           60
Leu Glu Arg Ser Trp Gln Lys Asn Ser Asn Leu Leu Ala Gly Ala Glu
65           70           75           80
Gln Lys Ala Asp Ile Ala Phe Glu Phe Leu Asn Lys Leu Gly Val Pro
          85           90           95
Tyr Tyr Cys Phe His
          100

```

&lt;210&gt; 2419

&lt;211&gt; 318

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2419

```

aaattttcag aagtcttggt gttgcgcggt caaacagggg ccgaggaggg acgaccgcct
60
ccccgtgacg ctgcttcttc ttcttgcttg cagctgaggg gtctgttttg tgtcgttcc
120
gctccttcct cacgtacaca gggggcagct tagcctctgg gatgggagtg gcttcataca
180
tgagacacat gcccgagtcg aggtagatgt cgctgtcgtc ctgcggcggg gtgggtgggg
240
tccagaacgg catgacttct gtctgcccat cgacatcttc gtagacatac tccatgttgt
300
aggcatcccc tcacgctg
318

```

&lt;210&gt; 2420

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2420

```

Met Glu Tyr Val Tyr Glu Asp Val Asp Gly Gln Thr Glu Val Met Pro
 1           5           10           15
Phe Trp Thr Pro Pro Thr Pro Pro Gln Asp Asp Ser Asp Ile Tyr Leu
          20           25           30
Asp Ser Gly Met Cys Leu Met Tyr Glu Ala Thr Pro Ile Pro Glu Ala
          35           40           45
Lys Leu Pro Pro Val Tyr Val Arg Lys Glu Arg Lys Arg His Lys Thr
          50           55           60
Asp Pro Ser Ala Ala Gly Arg Lys Lys Lys Gln Arg His Gly Glu Ala
65           70           75           80
Val Val Pro Pro Arg Ser Leu Phe Asp Arg Ala Thr Pro Gly Leu Leu

```



Lys Ile
 85
90
95

<210> 2421  
 <211> 420  
 <212> DNA  
 <213> Homo sapiens

<400> 2421  
 nnacgcgtgg tgtcttttat ggctgttttc ggtctctgtc tgctgctggc aaaactgctg  
 60  
 tactggttgt ttgacagtgc agggcttgtg cacagacgtg agccacaggg cagcacaacg  
 120  
 ctgtcgcaag tctgagtagg gattatcatg acggatacaa cttcagcccc gcgttacgcg  
 180  
 ctgcgtgggc tacagcttat tggctggcgt gacatgcaac acgcgctgga tttcctgttc  
 240  
 gcggacgggc agatgaaatc gggcacgctg gtggccatca acgcagaaaa gatgctggcg  
 300  
 gttgaagata atgcggaagt gaaaagcctg attgaagccg cggagttaa ataccggcc  
 360  
 ggtattagcg tagtgcgttc aattcgtaaa aagttcccc acgctggagt gtgctcgca  
 420

<210> 2422  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 2422  
 Met Thr Asp Thr Thr Ser Ala Pro Arg Tyr Ala Leu Arg Gly Leu Gln  
 1 5 10 15  
 Leu Ile Gly Trp Arg Asp Met Gln His Ala Leu Asp Phe Leu Phe Ala  
 20 25 30  
 Asp Gly Gln Met Lys Ser Gly Thr Leu Val Ala Ile Asn Ala Glu Lys  
 35 40 45  
 Met Leu Ala Val Glu Asp Asn Ala Glu Val Lys Ser Leu Ile Glu Ala  
 50 55 60  
 Ala Glu Phe Lys Tyr Pro Ala Gly Ile Ser Val Val Arg Ser Ile Arg  
 65 70 75 80  
 Lys Lys Phe Pro His Ala Gly Val Cys Ser Arg  
 85 90

<210> 2423  
 <211> 371  
 <212> DNA  
 <213> Homo sapiens

<400> 2423  
 tgatcaagtc ggaggattcg gcagggcgca gccatgaacg agaaggcgtc cgtctccaag  
 60  
 gagctcaacg ccaagcacia gaagatattg gaaggcttcc tacggcatcc tgagaataga  
 120

gaatgcgcag actgcaagtc aaagggctcct cgatggggcaa gtgtgaatct aggtatcttt  
 180  
 atatgcatga catgttcttg cattcataga agcctggggg tgcacatatc taaggtaaga  
 240  
 tctgccaccc tggatacatg gctgccagag caagttgcat ttattcaatc aatgggaaac  
 300  
 gaaaaagcaa atagctattg ggaagcagag ctgcctccta actacgatag ggttggaata  
 360  
 gagaatttga t  
 371

<210> 2424  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

<400> 2424  
 Met Asn Glu Lys Ala Ser Val Ser Lys Glu Leu Asn Ala Lys His Lys  
 1 5 10 15  
 Lys Ile Leu Glu Gly Leu Leu Arg His Pro Glu Asn Arg Glu Cys Ala  
 20 25 30  
 Asp Cys Lys Ser Lys Gly Pro Arg Trp Ala Ser Val Asn Leu Gly Ile  
 35 40 45  
 Phe Ile Cys Met Thr Cys Ser Gly Ile His Arg Ser Leu Gly Val His  
 50 55 60  
 Ile Ser Lys Val Arg Ser Ala Thr Leu Asp Thr Trp Leu Pro Glu Gln  
 65 70 75 80  
 Val Ala Phe Ile Gln Ser Met Gly Asn Glu Lys Ala Asn Ser Tyr Trp  
 85 90 95  
 Glu Ala Glu Leu Pro Pro Asn Tyr Asp Arg Val Gly Ile Glu Asn Leu  
 100 105 110

<210> 2425  
 <211> 411  
 <212> DNA  
 <213> Homo sapiens

<400> 2425  
 accggtttgc aggcctggaa agacgggcat ttcgacctgg tgategtcga ctgcaacatg  
 60  
 cccgtcctga acggctacga gatgaccgcg cgctgcgcg aacatgaagc cncgccatg  
 120  
 acctcccggc ctgcaagggg gttegggttc accgccacg cccagcccga ggaacgcccc  
 180  
 cgctgcaagg aagccggcat gaacgactgc ctgttcaagc ccatcagcct gaccaccctc  
 240  
 aaccagaaac tcgccgacgt caccgccgcg ccgctgccga gccaggccgc cttcagcctc  
 300  
 gacggcctgc acgccctgac cgggggagag ccgctgctga tgcgtcgtt gatcgacgag  
 360  
 ctgctgagca gttgccaggc ggcccgcgag gcaactgctc gactgcccac c  
 411

<210> 2426

<211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 2426  
 Thr Gly Leu Gln Ala Trp Lys Asp Gly His Phe Asp Leu Val Ile Val  
 1 5 10 15  
 Asp Cys Asn Met Pro Val Leu Asn Gly Tyr Glu Met Thr Arg Arg Leu  
 20 25 30  
 Arg Glu His Glu Ala Xaa Ala Met Thr Ser Arg Pro Ala Arg Gly Phe  
 35 40 45  
 Gly Phe Thr Ala His Ala Gln Pro Glu Glu Arg Pro Arg Cys Lys Glu  
 50 55 60  
 Ala Gly Met Asn Asp Cys Leu Phe Lys Pro Ile Ser Leu Thr Thr Leu  
 65 70 75 80  
 Asn Gln Lys Leu Ala Asp Val Thr Pro Arg Pro Arg Pro Ser Gln Ala  
 85 90 95  
 Ala Phe Ser Leu Asp Gly Leu His Ala Leu Thr Gly Gly Glu Pro Leu  
 100 105 110  
 Leu Met Arg Arg Leu Ile Asp Glu Leu Leu Ser Ser Cys Gln Ala Ala  
 115 120 125  
 Arg Glu Ala Leu Leu Gly Leu Pro Ile  
 130 135

<210> 2427  
 <211> 293  
 <212> DNA  
 <213> Homo sapiens

<400> 2427  
 cataacaaag gcttagggat tttggtgccc tgtgcaattn tggcagcttt tctgttgatt  
 60  
 tggagcgtaa aatgttgcag agcccagcta gaagccagga ggagcagaca cctgtctgat  
 120  
 ggagcccaac aagaaagatg ttgtgtccct cctggtgagc gctgtcccag tgcacccgat  
 180  
 aatggcgaag aaaatgtgcc tctttcagga aaagtatagg aaatgagaga agactgtgac  
 240  
 aactcatgac ctgcatcctt aatatccagt gacttcatct ccccttcacg cgt  
 293

<210> 2428  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 2428  
 His Asn Lys Gly Leu Gly Ile Leu Val Pro Cys Ala Ile Xaa Ala Ala  
 1 5 10 15  
 Phe Leu Leu Ile Trp Ser Val Lys Cys Cys Arg Ala Gln Leu Glu Ala  
 20 25 30  
 Arg Arg Ser Arg His Pro Ala Asp Gly Ala Gln Gln Glu Arg Cys Cys  
 35 40 45  
 Val Pro Pro Gly Glu Arg Cys Pro Ser Ala Pro Asp Asn Gly Glu Glu

50 55 60  
 Asn Val Pro Leu Ser Gly Lys Val  
 65 70

<210> 2429  
 <211> 428  
 <212> DNA  
 <213> Homo sapiens

<400> 2429  
 tcgcgtcggg tcggcgaggt tgacgctggt gatcctaage cccatgagga cgacgacctc  
 60  
 atcgccgaga tggcggggct acaggctgct cagtcgatcc gggaatcctt gaacaaggct  
 120  
 gatgtcctgc tcaatgggggt agagacgtcg accggtccgc agccgggtgc gcttgctttg  
 180  
 ctggaacagg ccgtacatga gctggatggc actggggatg ctgatcctcg cgccgctgag  
 240  
 ttggctgagc gcgcccgcga gatgtcgtat gacctactg acctcgctgc ttcggctcgt  
 300  
 ggccatgcgg ctgcggctga agctgatccg caacggcttg aggaattggg gggtcgtttg  
 360  
 gcggctattc agcggtctgt gagggcgcgc accaccaccc tcgacgatct cctcgactcc  
 420  
 actgcggc  
 428

<210> 2430  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 2430  
 Ser Arg Arg Val Gly Glu Val Asp Ala Val Asp Pro Lys Pro His Glu  
 1 5 10 15  
 Asp Asp Asp Leu Ile Ala Glu Met Ala Gly Leu Gln Ala Ala Gln Ser  
 20 25 30  
 Ile Arg Glu Ser Leu Asn Lys Ala Asp Val Leu Leu Asn Gly Val Glu  
 35 40 45  
 Thr Ser Thr Gly Pro Gln Pro Gly Ala Leu Ala Leu Leu Glu Gln Ala  
 50 55 60  
 Val His Glu Leu Asp Gly Thr Gly Asp Ala Asp Pro Arg Ala Ala Glu  
 65 70 75 80  
 Leu Ala Glu Arg Ala Arg Gln Met Ser Tyr Asp Leu Thr Asp Leu Ala  
 85 90 95  
 Ala Ser Val Ala Gly His Ala Ala Arg Ala Glu Ala Asp Pro Gln Arg  
 100 105 110  
 Leu Glu Glu Leu Gly Gly Arg Leu Ala Ala Ile Gln Arg Leu Leu Arg  
 115 120 125  
 Ala Arg Thr Thr Thr Leu Asp Asp Leu Leu Asp Ser Thr Ala  
 130 135 140

<210> 2431  
 <211> 409

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2431

```

nnacgcgtta acaattaaag cattaacgcc agatgaatgg caaaaacaaa aacattttat
60
atagtcggtt aaatagggat tttcatgggt caatttatta ttcaaggtgg ctgccagtta
120
aatggcgagg taacaatttc tggggcaaaa aatgccgcac taccaatcct atttgctact
180
ttattatctg aggtgatata caatttaagc aatgtaccgc ttttaaaaga tattgccacc
240
actatcgagt tgtaaaaaga gctgggtgct actgctactc agactcaaca ctgcgtgcat
300
attaatgcga aagaagttaa gaactatact gcttcttatg aattagttag aagtatgcgt
360
gcttcaattt tggcattagg tccattgggt gctcgggttc gtgaagctt
409

```

&lt;210&gt; 2432

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2432

```

Met Gly Gln Phe Ile Ile Gln Gly Gly Cys Gln Leu Asn Gly Glu Val
1      5      10      15
Thr Ile Ser Gly Ala Lys Asn Ala Ala Leu Pro Ile Leu Phe Ala Thr
20     25     30
Leu Leu Ser Glu Gly Asp Ile Asn Leu Ser Asn Val Pro Leu Leu Lys
35     40     45
Asp Ile Ala Thr Thr Ile Glu Leu Leu Lys Glu Leu Gly Ala Thr Ala
50     55     60
Thr Gln Thr Gln His Cys Val His Ile Asn Ala Lys Glu Val Lys Asn
65     70     75     80
Tyr Thr Ala Ser Tyr Glu Leu Val Arg Ser Met Arg Ala Ser Ile Leu
85     90     95
Ala Leu Gly Pro Leu Val Ala Arg Phe Gly Glu Ala
100    105

```

&lt;210&gt; 2433

&lt;211&gt; 655

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2433

```

caattgccta caatattcag tacagtcaca tgctgcatag gtttgcagtc tagaaacaac
60
aggctacacc acacagccga ggcgtgtgga ggactatacc atctgggttt acgtaagtgc
120
gctctatgat gctcacgtaa caatgaaatc acggaatctc tctctcagaa catttccccg
180
ttgtgaagca gcacgtgact ataattcttt cccaggttta cccctgaagt tcaagtgcaa
240

```

tgcccctgca cagcacagag caggggacga taggaggcgt gccttctcca gctgaaccac  
 300  
 cggggccagcc gggcgggcag tgggggttgg ggggagggtt gacccattgg tgctgccacg  
 360  
 accaaagaga caggatcttg gagagagtga ggcctctgtg caggggacga tgaaggccca  
 420  
 atctggggac atcagggaaa gcagcaaggg tctggctgat tgtgcaaaaa gaactttttc  
 480  
 tgtgactgcc gtgttccaaa cacacccttt gcttttacia aaacccaaac tgggaggttt  
 540  
 agcaaaaggc acagtttcag agcataataa agacagagca gaatgggaga ggaggttaat  
 600  
 caaatgggcc atcactcaat gcagggaggg gaggggtgtg ctcaggacaa cgcgt  
 655

<210> 2434

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2434

Met	Ala	His	Leu	Ile	Asn	Leu	Leu	Ser	His	Ser	Ala	Leu	Ser	Leu	Leu
1			5					10					15		
Cys	Ser	Glu	Thr	Val	Pro	Phe	Ala	Lys	Pro	Pro	Ser	Leu	Gly	Phe	Cys
			20					25					30		
Lys	Ser	Lys	Gly	Cys	Val	Trp	Asn	Thr	Ala	Val	Thr	Glu	Lys	Val	Leu
		35					40					45			
Phe	Ala	Gln	Ser	Ala	Arg	Pro	Leu	Leu	Leu	Ser	Leu	Met	Ser	Pro	Asp
	50					55					60				
Trp	Ala	Phe	Ile	Val	Pro	Cys	Thr	Glu	Ala	Ser	Leu	Ser	Pro	Arg	Ser
65					70					75					80
Cys	Leu	Phe	Gly	Arg	Gly	Ser	Thr	Asn	Gly	Ser	Thr	Leu	Pro	Pro	Thr
			85						90					95	
Pro	Thr	Ala	Arg	Pro	Ala	Gly	Pro	Val	Val	Gln	Leu	Glu	Lys	Ala	Arg
		100					105						110		
Leu	Leu	Ser	Ser	Pro	Ala	Leu	Cys	Cys	Ala	Gly	Ala	Leu	His	Leu	Asn
		115					120					125			
Phe	Arg	Gly	Lys	Pro	Gly	Lys	Arg	Leu							
	130						135								

<210> 2435

<211> 401

<212> DNA

<213> Homo sapiens

<400> 2435

aagctttcct tcaccggttc taccacagtg ggccggaccc ttttgaagng cgcggccgat  
 60  
 aacgtgctgc gtacctccat ggaactgggc ngcaatgcc cattcattgt ctttgaggac  
 120  
 gcagatattg accaagcggc ccagggtgag atgggcgcca agatgcgcaa ttcggcgag  
 180  
 gcctgcaccg cagctaaccg cttcttggtc caccagtcctg ttgctgagga gttctctgag  
 240

aaactcgttg cggagtttga gaagctcaat ctgggcaatg gtagggacga aggtattacc  
 300  
 tgcggacctc tcgtcgagtc caaggctttg gagagcattg cggcattggt ggacgatgct  
 360  
 gcagaaaagg gcgctacat ctccaccggc ggtaagcgcg c  
 401

<210> 2436  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 2436  
 Lys Leu Ser Phe Thr Gly Ser Thr Pro Val Gly Arg Thr Leu Leu Lys  
 1 5 10 15  
 Xaa Ala Ala Asp Asn Val Leu Arg Thr Ser Met Glu Leu Gly Xaa Asn  
 20 25 30  
 Ala Pro Phe Ile Val Phe Glu Asp Ala Asp Ile Asp Gln Ala Val Gln  
 35 40 45  
 Gly Ala Met Gly Ala Lys Met Arg Asn Ile Gly Glu Ala Cys Thr Ala  
 50 55 60  
 Ala Asn Arg Phe Leu Val His Glu Ser Val Ala Glu Glu Phe Ser Glu  
 65 70 75 80  
 Lys Leu Val Ala Glu Phe Glu Lys Leu Asn Leu Gly Asn Gly Met Asp  
 85 90 95  
 Glu Gly Ile Thr Cys Gly Pro Leu Val Glu Ser Lys Ala Leu Glu Ser  
 100 105 110  
 Ile Ala Ala Leu Val Asp Asp Ala Ala Glu Lys Gly Ala Thr Ile Ser  
 115 120 125  
 Thr Gly Gly Lys Arg  
 130

<210> 2437  
 <211> 449  
 <212> DNA  
 <213> Homo sapiens

<400> 2437  
 aagcttagta ccaaaaagaa aacaaaaaca aaaacaaaac aaaccccccc cccacagag  
 60  
 taaaataacg gaaaaagatc tactatgcta gcactaaca aataatacgt agttatgaaa  
 120  
 atggtatgta tttttcaagc tagacgttca taatggtaga acatgaggag gaaaactgcc  
 180  
 tcttaaatcc caccacttac tgtgacacag tgaccgggcc ctgcagcgga ctggatagtt  
 240  
 gtagcagagt cctggacgga aacagatggc actcaaaagg tggcgcgag ttcagagaaa  
 300  
 tgcctatgta cggatttggc ccaatgcctc agcctgacct cagggacctt cgggggtctg  
 360  
 ctccgcgccc acccttacac atctgtgacc ccacacactt ccacccagc gccacattta  
 420  
 agttccagtc atttcatttt atcgctgtg  
 449

<210> 2438  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 2438  
 Met Val Glu His Glu Glu Glu Asn Cys Leu Leu Asn Pro Thr Thr Tyr  
 1 5 10 15  
 Cys Asp Thr Val Thr Gly Pro Cys Ser Gly Leu Asp Ser Cys Ile Arg  
 20 25 30  
 Val Leu Asp Gly Asn Arg Trp His Ser Lys Gly Gly Ala Gln Phe Arg  
 35 40 45  
 Glu Met Pro Met Tyr Gly Phe Gly Pro Met Pro Gln Pro Asp Leu Arg  
 50 55 60  
 Asp Leu Arg Gly Ser Ala Pro Arg Pro Pro Leu His Ile Cys Asp Pro  
 65 70 75 80  
 Thr His Phe His Pro Ser Ala Thr Phe Lys Phe Gln Ser Phe His Phe  
 85 90 95  
 Ile Ala Val

<210> 2439  
 <211> 4425  
 <212> DNA  
 <213> Homo sapiens

<400> 2439  
 ccctcagcat cggaccagag tacttggtat ctggatgaat cgacactcac tgacaacatc  
 60  
 aaaaagacac tgcacaagtt ctgtggcccc tcccctgtgg tcttcagtga tgtgaactcc  
 120  
 atgtatctgt cttccacgga gccgccagcc gctgctgaat gggcatgtct gctgcgcctt  
 180  
 ctgagggggc gtgagccaga gggcgctctg aacctgctaa gcattgtgcg ggagatgttc  
 240  
 aagcggaggg acagcaatgc tgcccccttg ttggaaatcc tcaactgacca gtgcctcacc  
 300  
 tatgaacaga taacagggtg gtggtatagc gtacgtacct cagcctcaca cagcagtgcc  
 360  
 agtgggcaca cgggcccgtg caacgggcag tcagaggtgg cagcccatgc ctgtgccagc  
 420  
 atgtgtgacg agatggtcac actgtggagg ctggccgtgc tggaccctgc actcagcccc  
 480  
 cagcggcgcc gggaaactgtg tacgcagctg cggcagtggc aactgaaggt gattgagaac  
 540  
 gtcaagcggg gccaacacaa gaagacgctg gagcggctct tccccggctt ccggccagcg  
 600  
 gtggaggcct gctacttcaa ctgggaagag gcctaccac ttcttggtgt cacctacagc  
 660  
 ggcaactgaca ggaagctggc actgtgctgg gcccgggccc tgccctctcg gccaggtgcc  
 720  
 tcccgctctg ggggcctgga ggaatcccgg gaccggcccc gaccccttcc tactgagcca  
 780



gctgtgcggc ccaaggagcc tgggaccaag cgaaagggct tgggtgaggg ggtccctca  
840  
tcacagcggg gtccccgccc cctctcagct gaagggggag ataaagctct acataagatg  
900  
gggccagggtg ggggcaaagc caaggcactg ggtggggctg gcagtgggag caagggtca  
960  
gcaggtggcg gaagcaagcg acggctgagc agcgaagaca gctccctgga gccagacctg  
1020  
gccgagatga gcctggatga cagcagcctg gccctgggcg cagaggccag caccttcggg  
1080  
ggattccctg agagccctcc accctgtcct ctccacggtg gctcccgagg cccttcact  
1140  
ttccttcctg agccccaga tacttatgaa gaagatggtg gtgtgtactt ctcggaagg  
1200  
cctgagcctc ccacagcctc tgttgcccc cctggcctac tgctgggga tgtctgtacc  
1260  
caggacgacc tcccttctac agatgagagt ggcaatgggc ttcccaaac caaaggagga  
1320  
gccctgcag ttggagagga ggatgatgac taccaggcgt actatctgaa tgcccaggat  
1380  
ggggctgggg gcgaggaaga gaaggccgag ggcggggctg gggaggagca cgacctgtt  
1440  
gctgggctga agccactgga acaggagagt cgcattggagg tactgtttgc ctgtgctgag  
1500  
gccctgcatt cgcattggct tagcagttag gcctcccgct tctctgtgga gcttgcccag  
1560  
gatctgctag ccaaccacc cgacctcaag ggcaagaaga acaaggatc cacgagccgt  
1620  
cagacctggg tggctacca caccctgagc aaggcgccct tctgttgac agtgctaagt  
1680  
gagcgtccag agcgccacaa cctggccttc cgagttggca tgtttgcctt ggagctacag  
1740  
aggcctccag cttctaccaa ggccttgag gtgaagctgg cataccagga gtctgaggtg  
1800  
gctgcctgc tcaagaagat ccctctgggt ccaagtgaga tgagtaccat gcggtgccg  
1860  
gcagaggaac ttcgggaggg gacactctgt gactatcggc ctgtgttgcc tctcatgctg  
1920  
gccagtttca tctttgacgt tctctgtgct ccagtgggtt ctcccacagg ttcccgccc  
1980  
ccaagtgcga actggaacag cgagacacct ggggatgagg agcttgatt tgaagcagca  
2040  
gttgcctcct tgggcatgaa gacaacagt agcgaggcag aacatccct cttatgtgaa  
2100  
ggcacacgtc gggagaaggg tgacctggca ttagcactaa tgatcactta caaggacgac  
2160  
caggccaagc ttaagaagat cttagacaaa ctcttgacc gagagagcca gacacataag  
2220  
ccacagacgc tgagttcttt ctactcatct agccgcccc aacagccag ccagaggctc  
2280  
ccttcaaagc acggggggccc atctgcccc ggggcctgc aaccactgac ctcaggctct  
2340  
gcagggcctg ctcaaccagg gagtgtggca ggggctgggc caggccccac tgagggcttc  
2400

acagagaaga atgtgcctga gagttcccca cattccccct gtgaggggtct tccatctgag  
2460  
gcagctttga ccccaaggcc agaagggaag gttcctagcc gcttggcaact tggcagtcgt  
2520  
ggaggctata atggacgggg atgggggtcc tcaggacggc ctaagaagaa gcacacaggc  
2580  
atggccagca ttgacagcag tgccccctgaa acaacatcgg atagttcccc caccttaage  
2640  
cggagaccac ttcgaggggg ctggggcccc acctcctggg gtcgaggtca ggacagtgcg  
2700  
agcattagca gctcttcttc ggactccctg ggctcctcat cctccagtgg aagtcgccgg  
2760  
gccagtgcga gtggaggagc ccgggcgaag actgttgaag ttggcaggta caagggccgc  
2820  
cgccccgaga gtcattcccc tcatgtaccc aatcagccat cagaggcagc tgcacacttc  
2880  
tacttcgagc tggcgaagac agtgctgac aaggcagggg gcaacagcag cacttcatt  
2940  
ttcacacatc catcttcttc agggggccac cagggtcctc accgcaacct gcacctttgc  
3000  
gccttcgaga ttgggcttta tgcccttggc ctgcacaact ttgtttctcc caactggctc  
3060  
tcacgtactt attcttccca cgtttcctgg attacaggcc aggccatgga gataggcagc  
3120  
gcagccctga ctatactggt agaattgctgg gatgggcacc tgacaccccc tgaggttgca  
3180  
tccttggtg acagggcatc acgggcaaga gactccaata tggtgagggc ggcagcagag  
3240  
ctggccctga gctgcctgcc tcacgcccac gcattgaacc ctaatgagat ccagcggggc  
3300  
ctggtgcagt gcaaggaaca ggacaacctg atgttgaga aggcctgcat ggcagtggaa  
3360  
gaggcagcta aggggtgggg cgtgtaccct gaagtgtgt ttgaggttgc tcaccagtgg  
3420  
ttctggctat atgagcaaac tgcaggtggc tcattccacag ccctgtaagg ggctacaagc  
3480  
tgtagtgcca gtgggatcag ggcaggtggg gaagctgggc ggggtatgcc tgagggtaga  
3540  
ggggggcccag ggactgagcc gggtacagtg gcagcggcag cagtgcagc agcagccaca  
3600  
gtggtgcccg tcatactggt ggggtctagt ttatacccgg gtccaggact ggggcatggc  
3660  
cactccctg gcctgcaccc ctacactgct ctacagcccc acctgccctg tagccctcag  
3720  
tatctcactc acccagctca ccttccccac cccatgcctc acatgccccg gcctgccgtc  
3780  
ttccctgtgc ccagctctgc ataccacag gtgagaccag tgttctgctg gggggtaagg  
3840  
catgggaaaa tactgggaat tcataggggg ttggagtggg tactctggga gtataattgg  
3900  
tcagtcggag agtcttggtg aggtgggtgg agtctggggg acccagccca actaaaaata  
3960  
gaaatgacgg ccgggcatgg tggctcatgc ctgtaatccc agcactttga gaggcgatg  
4020

tgggtggatc acttgaggtc aggagtcca gaccagcctg gccaacatgg ggaaaccccg  
 4080  
 tctctactaa aaattagctg agtgcacgcc tgtaatccca gcttcttggg aggctgagat  
 4140  
 ggggaatcact tgaacctggg aggcagaggt tgcagtgagc cgatatcgtg ccaactgcact  
 4200  
 ccagcctgga ggacagagcg agactctatc tcaaaaaaca tgtcaggata gcagcttggtg  
 4260  
 ggggtgaagc ccgacagcaa catcctaatac aagtttgga tcttccccct tcttctccct  
 4320  
 gcccttaggg tgtgcatcct gcattcctag gggctcagta ccettattca gtgactcctc  
 4380  
 cctcacttgc tgccactgct gtgtctttcc ccgttccttc catgg  
 4425

<210> 2440

<211> 1306

<212> PRT

<213> Homo sapiens

<400> 2440

Pro	Ser	Ala	Ser	Asp	Gln	Ser	Thr	Trp	Tyr	Leu	Asp	Glu	Ser	Thr	Leu
1			5						10					15	
Thr	Asp	Asn	Ile	Lys	Lys	Thr	Leu	His	Lys	Phe	Cys	Gly	Pro	Ser	Pro
		20						25					30		
Val	Val	Phe	Ser	Asp	Val	Asn	Ser	Met	Tyr	Leu	Ser	Ser	Thr	Glu	Pro
		35				40						45			
Pro	Ala	Ala	Ala	Glu	Trp	Ala	Cys	Leu	Leu	Arg	Pro	Leu	Arg	Gly	Arg
	50					55					60				
Glu	Pro	Glu	Gly	Val	Trp	Asn	Leu	Leu	Ser	Ile	Val	Arg	Glu	Met	Phe
65				70					75					80	
Lys	Arg	Arg	Asp	Ser	Asn	Ala	Ala	Pro	Leu	Leu	Glu	Ile	Leu	Thr	Asp
			85					90						95	
Gln	Cys	Leu	Thr	Tyr	Glu	Gln	Ile	Thr	Gly	Trp	Trp	Tyr	Ser	Val	Arg
		100						105					110		
Thr	Ser	Ala	Ser	His	Ser	Ser	Ala	Ser	Gly	His	Thr	Gly	Arg	Ser	Asn
		115					120					125			
Gly	Gln	Ser	Glu	Val	Ala	Ala	His	Ala	Cys	Ala	Ser	Met	Cys	Asp	Glu
	130					135					140				
Met	Val	Thr	Leu	Trp	Arg	Leu	Ala	Val	Leu	Asp	Pro	Ala	Leu	Ser	Pro
145					150					155				160	
Gln	Arg	Arg	Arg	Glu	Leu	Cys	Thr	Gln	Leu	Arg	Gln	Trp	Gln	Leu	Lys
			165					170						175	
Val	Ile	Glu	Asn	Val	Lys	Arg	Gly	Gln	His	Lys	Lys	Thr	Leu	Glu	Arg
		180					185						190		
Leu	Phe	Pro	Gly	Phe	Arg	Pro	Ala	Val	Glu	Ala	Cys	Tyr	Phe	Asn	Trp
	195					200					205				
Glu	Glu	Ala	Tyr	Pro	Leu	Pro	Gly	Val	Thr	Tyr	Ser	Gly	Thr	Asp	Arg
	210					215					220				
Lys	Leu	Ala	Leu	Cys	Trp	Ala	Arg	Ala	Leu	Pro	Ser	Arg	Pro	Gly	Ala
225				230						235				240	
Ser	Arg	Ser	Gly	Gly	Leu	Glu	Glu	Ser	Arg	Asp	Arg	Pro	Arg	Pro	Leu
			245					250				255			
Pro	Thr	Glu	Pro	Ala	Val	Arg	Pro	Lys	Glu	Pro	Gly	Thr	Lys	Arg	Lys

Gly	Leu	Gly	Glu	Gly	Val	Pro	Ser	Ser	Gln	Arg	Gly	Pro	Arg	Arg	Leu
		275					280					285			
Ser	Ala	Glu	Gly	Gly	Asp	Lys	Ala	Leu	His	Lys	Met	Gly	Pro	Gly	Gly
		290				295					300				
Gly	Lys	Ala	Lys	Ala	Leu	Gly	Gly	Ala	Gly	Ser	Gly	Ser	Lys	Gly	Ser
305					310					315					320
Ala	Gly	Gly	Gly	Ser	Lys	Arg	Arg	Leu	Ser	Ser	Glu	Asp	Ser	Ser	Leu
				325					330					335	
Glu	Pro	Asp	Leu	Ala	Glu	Met	Ser	Leu	Asp	Asp	Ser	Ser	Leu	Ala	Leu
			340					345					350		
Gly	Ala	Glu	Ala	Ser	Thr	Phe	Gly	Gly	Phe	Pro	Glu	Ser	Pro	Pro	Pro
		355					360					365			
Cys	Pro	Leu	His	Gly	Gly	Ser	Arg	Gly	Pro	Ser	Thr	Phe	Leu	Pro	Glu
		370				375					380				
Pro	Pro	Asp	Thr	Tyr	Glu	Glu	Asp	Gly	Gly	Val	Tyr	Phe	Ser	Glu	Gly
385					390					395					400
Pro	Glu	Pro	Pro	Thr	Ala	Ser	Val	Gly	Pro	Pro	Gly	Leu	Leu	Pro	Gly
				405					410					415	
Asp	Val	Cys	Thr	Gln	Asp	Asp	Leu	Pro	Ser	Thr	Asp	Glu	Ser	Gly	Asn
				420				425					430		
Gly	Leu	Pro	Lys	Thr	Lys	Glu	Ala	Ala	Pro	Ala	Val	Gly	Glu	Glu	Asp
		435					440					445			
Asp	Asp	Tyr	Gln	Ala	Tyr	Tyr	Leu	Asn	Ala	Gln	Asp	Gly	Ala	Gly	Gly
		450				455					460				
Glu	Glu	Glu	Lys	Ala	Glu	Gly	Gly	Ala	Gly	Glu	Glu	His	Asp	Leu	Phe
465					470					475					480
Ala	Gly	Leu	Lys	Pro	Leu	Glu	Gln	Glu	Ser	Arg	Met	Glu	Val	Leu	Phe
				485					490					495	
Ala	Cys	Ala	Glu	Ala	Leu	His	Ala	His	Gly	Tyr	Ser	Ser	Glu	Ala	Ser
			500					505					510		
Arg	Leu	Thr	Val	Glu	Leu	Ala	Gln	Asp	Leu	Leu	Ala	Asn	Pro	Pro	Asp
			515				520					525			
Leu	Lys	Gly	Lys	Lys	Asn	Lys	Val	Ser	Thr	Ser	Arg	Gln	Thr	Trp	Val
		530				535					540				
Ala	Thr	Asn	Thr	Leu	Ser	Lys	Ala	Ala	Phe	Leu	Leu	Thr	Val	Leu	Ser
545					550				555						560
Glu	Arg	Pro	Glu	Arg	His	Asn	Leu	Ala	Phe	Arg	Val	Gly	Met	Phe	Ala
				565					570					575	
Leu	Glu	Leu	Gln	Arg	Pro	Pro	Ala	Ser	Thr	Lys	Ala	Leu	Glu	Val	Lys
			580					585					590		
Leu	Ala	Tyr	Gln	Glu	Ser	Glu	Val	Ala	Ala	Leu	Leu	Lys	Lys	Ile	Pro
		595					600					605			
Leu	Gly	Pro	Ser	Glu	Met	Ser	Thr	Met	Arg	Cys	Arg	Ala	Glu	Glu	Leu
		610													

690		695		700
Glu Lys Gly Asp Leu Ala Leu Ala Leu Met Ile Thr Tyr Lys Asp Asp				
705		710		715
Gln Ala Lys Leu Lys Lys Ile Leu Asp Lys Leu Leu Asp Arg Glu Ser				
	725		730	735
Gln Thr His Lys Pro Gln Thr Leu Ser Ser Phe Tyr Ser Ser Ser Arg				
	740		745	750
Pro Thr Thr Ala Ser Gln Arg Ser Pro Ser Lys His Gly Gly Pro Ser				
	755		760	765
Ala Pro Gly Ala Leu Gln Pro Leu Thr Ser Gly Ser Ala Gly Pro Ala				
	770		775	780
Gln Pro Gly Ser Val Ala Gly Ala Gly Pro Gly Pro Thr Glu Gly Phe				
785		790		795
Thr Glu Lys Asn Val Pro Glu Ser Ser Pro His Ser Pro Cys Glu Gly				
	805		810	815
Leu Pro Ser Glu Ala Ala Leu Thr Pro Arg Pro Glu Gly Lys Val Pro				
	820		825	830
Ser Arg Leu Ala Leu Gly Ser Arg Gly Gly Tyr Asn Gly Arg Gly Trp				
	835		840	845
Gly Ser Ser Gly Arg Pro Lys Lys Lys His Thr Gly Met Ala Ser Ile				
	850		855	860
Asp Ser Ser Ala Pro Glu Thr Thr Ser Asp Ser Ser Pro Thr Leu Ser				
865		870		875
Arg Arg Pro Leu Arg Gly Gly Trp Ala Pro Thr Ser Trp Gly Arg Gly				
	885		890	895
Gln Asp Ser Asp Ser Ile Ser Ser Ser Ser Ser Asp Ser Leu Gly Ser				
	900		905	910
Ser Ser Ser Ser Gly Ser Arg Arg Ala Ser Ala Ser Gly Gly Ala Arg				
	915		920	925
Ala Lys Thr Val Glu Val Gly Arg Tyr Lys Gly Arg Arg Pro Glu Ser				
	930		935	940
His Ala Pro His Val Pro Asn Gln Pro Ser Glu Ala Ala Ala His Phe				
945		950		955
Tyr Phe Glu Leu Ala Lys Thr Val Leu Ile Lys Ala Gly Gly Asn Ser				
	965		970	975
Ser Thr Ser Ile Phe Thr His Pro Ser Ser Ser Gly Gly His Gln Gly				
	980		985	990
Pro His Arg Asn Leu His Leu Cys Ala Phe Glu Ile Gly Leu Tyr Ala				
	995		1000	1005
Leu Gly Leu His Asn Phe Val Ser Pro Asn Trp Leu Ser Arg Thr Tyr				
	1010		1015	1020
Ser Ser His Val Ser Trp Ile Thr Gly Gln Ala Met Glu Ile Gly Ser				
1025		1030		1035
Ala Ala Leu Thr Ile Leu Val Glu Cys Trp Asp Gly His Leu Thr Pro				
	1045		1050	1055
Pro Glu Val Ala Ser Leu Ala Asp Arg Ala Ser Arg Ala Arg Asp Ser				
	1060		1065	1070
Asn Met Val Arg Ala Ala Ala Glu Leu Ala Leu Ser Cys Leu Pro His				
	1075		1080	1085
Ala His Ala Leu Asn Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys				
	1090		1095	1100
Lys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu				
1105		1110		1115
Glu Ala Ala Lys Gly Gly Gly Val Tyr Pro Glu Val Leu Phe Glu Val				

1125 1130 1135  
 Ala His Gln Trp Phe Trp Leu Tyr Glu Gln Thr Ala Gly Gly Ser Ser  
 1140 1145 1150  
 Thr Ala Arg Glu Gly Ala Thr Ser Cys Ser Ala Ser Gly Ile Arg Ala  
 1155 1160 1165  
 Gly Gly Glu Ala Gly Arg Gly Met Pro Glu Gly Arg Gly Gly Pro Gly  
 1170 1175 1180  
 Thr Glu Pro Val Thr Val Ala Ala Ala Ala Val Thr Ala Ala Ala Thr  
 1185 1190 1195 1200  
 Val Val Pro Val Ile Ser Val Gly Ser Ser Leu Tyr Pro Gly Pro Gly  
 1205 1210 1215  
 Leu Gly His Gly His Ser Pro Gly Leu His Pro Tyr Thr Ala Leu Gln  
 1220 1225 1230  
 Pro His Leu Pro Cys Ser Pro Gln Tyr Leu Thr His Pro Ala His Pro  
 1235 1240 1245  
 Ala His Pro Met Pro His Met Pro Arg Pro Ala Val Phe Pro Val Pro  
 1250 1255 1260  
 Ser Ser Ala Tyr Pro Gln Val Arg Pro Val Phe Cys Trp Gly Val Arg  
 1265 1270 1275 1280  
 His Gly Lys Ile Leu Gly Ile His Arg Gly Leu Glu Trp Val Leu Trp  
 1285 1290 1295  
 Glu Tyr Asn Trp Ser Val Gly Glu Ser Trp  
 1300 1305

<210> 2441  
 <211> 2244  
 <212> DNA  
 <213> Homo sapiens

<400> 2441  
 nacgcgtgtg tgtctgcatg catccatgtg tctgtacatg tatgtctcca tgtgtggtgt  
 60  
 ggaggacaca gaaggatgga gggaaaggca ccaactcacag aggcggcgct ggagaatttt  
 120  
 ccatttgtaa ttttggtttt ggtgaacatg cactttgcgt catgcaaacc aggtttctaa  
 180  
 acattaacaa ccggagagaa atgacatttt ggggccgcg gtgactcttg cgtgcctctg  
 240  
 ctgccccctg gtggcagccc cgagtcactt ccagcagggc cccccaccc caagggccca  
 300  
 gcctcgggca ggaagggtac aaagccccg ccgtggttct gccacgaggt ctctgggaaa  
 360  
 tgaggggaac agcacagcga cgtccttgcg tcctaaatgc atcccctggt ggccgttttt  
 420  
 cgccacacag gcttggcaaa atctctgcgt cactgagcag cattttaacc tcttgaatga  
 480  
 gatgcctcgg accttttggga tcctctttct gcacctetca ggggacaggt cccgtctgta  
 540  
 cggcgctgcc tacgagaaac ccaagttcat tactgcagcc aaaggaaagg tgcaggcggt  
 600  
 gggaggctcc tgcaagggtga tgcgtctggc cataagtccc actgccttct cccacctgct  
 660  
 ggccgtgtgc cagcagttcc ggaagcagac ccaggccccag gtgtacagtg aggacatggc  
 720

cctgaacata ggctcggaac cagaaggcct gcagggtgaa gagaaggagc gccctgtgca  
780  
gaggctcagt agcgtcctgg ggccccctgga ggagcttctg cagccgctat tccccctgct  
840  
cagcctctcc aaggccagag tgcagacacc tgcggttgtt gccgattcag ggaagtcgaa  
900  
gggcaaagac aaggagagga aaacgtccac aggacaacac agcacagtcc agcctgagggt  
960  
tgccgataag atagtcctgg tcacagacag acatctcctg gagctgccac tggaagggtct  
1020  
ctctgtgttc gatgaaggga caatttcctc tgtgtcacga gaattttctc ttcaaagtct  
1080  
gtggaatcgc ctccataaag aagagacaga aggtggcgtg aaaaaggagg gaagaagcag  
1140  
agaccccaaa aagagaagcc tagcgaagaa gggcaggag ggagcagatcc cccggaccat  
1200  
ccccctgac tgcattcatg tcgactcaga caacttcaag ttcgtcgtgg acccatacga  
1260  
ggaggcccag ggcccagaaa tgctaactcc tgtctccatc acccaagaca ttttggaag  
1320  
attccaagac acattcacgt cgcgatgggc gggacatctg ggaagcaagc actttcccag  
1380  
ccaggcccag tgggagcagg ccctgggcag ctgcagcggc ttcttcttct atggaatgga  
1440  
gagcttctctg tcccatatat tagtgagag attggctgcc atgaacttgc aagagtcca  
1500  
ggtggcagtc ctgctggacc tggcacggtc ctaccagagc ttgaagaggc acatggagag  
1560  
cgtggagcac aggagatctg ttggccgttg ggaagccaat tggagaaacg gtgcgtctcc  
1620  
ttcagaagat gagtggcgac gaggcggtga accaaggcga ggcttctcag acctgaagg  
1680  
acaagctgct gctgtccaa agctccgagc tccttccac cacgctcaac ttggtcctgt  
1740  
atgggctgcc gcaccaagcc atcgggtagt gcaggcctgg acctgcctcc catcagctgc  
1800  
tggggcccca gcacttgct ctgcccttgg ctctgccct ctgccaacce atccccacct  
1860  
cccggctccc atccccagct cccagctcgc tctcccctc ctgggcctct cccagccct  
1920  
tggtgcagcc tcagccaggg acctcccc agcgacttcc cgcaaggcag ccgcctggac  
1980  
ctcgagctct gcctgcctgt gtgcgccatg gggctctcgt cggggctgga gctgcgtctc  
2040  
ttcccggggc caggacaagg gcggcctccc cttggcgggc ctggtgctga gttgcttaga  
2100  
ccagaagact attcagacc tgagcctgtt ttgtattga gtgttccact aaacaaacaa  
2160  
caaaagccca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
2220  
aaaaaaaaaa aaaaaaaaaa aaaa  
2244

&lt;210&gt; 2442

<211> 168  
 <212> PRT  
 <213> Homo sapiens

<400> 2442  
 Met Gly Cys Arg Thr Lys Pro Ser Gly Ser Ala Gly Leu Asp Leu Pro  
 1 5 10 15  
 Pro Ile Ser Cys Trp Gly Pro Ser Thr Cys Leu Cys Pro Trp Leu Cys  
 20 25 30  
 Pro Ser Ala Asn Pro Ser Pro Pro Gly Ser His Pro Gln Leu Pro  
 35 40 45  
 Ala Arg Ser Pro Leu Pro Gly Pro Leu Pro Ser Pro Trp Cys Ser Leu  
 50 55 60  
 Ser Gln Gly Pro Ser Pro Ser Asp Phe Pro Gln Gly Ser Arg Leu Asp  
 65 70 75 80  
 Leu Glu Leu Cys Leu Pro Val Cys Ala Met Gly Ser Ala Ser Gly Leu  
 85 90 95  
 Glu Leu Arg Leu Phe Pro Gly Pro Gly Gln Gly Arg Pro Pro Leu Gly  
 100 105 110  
 Gly Ala Gly Ala Glu Leu Leu Arg Pro Glu Asp Tyr Ser Asp Arg Glu  
 115 120 125  
 Pro Val Phe Asp Leu Ser Val Pro Leu Asn Lys Gln Gln Lys Pro Lys  
 130 135 140  
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
 145 150 155 160  
 Lys Lys Lys Lys Lys Lys Lys Lys  
 165

<210> 2443  
 <211> 361  
 <212> DNA  
 <213> Homo sapiens

<400> 2443  
 nccgtgcgcg ctatcttgcg tcgtacgccg tccagggaag atgaaaaaat gctacaaacg  
 60  
 gccgatggac gattgcgcat tgatatcgaa tccatgcgca cctttgtaga gggcaaagaa  
 120  
 gtccatttga cgaaaaacga atttttaatt gtgcagactt tgtttacgca cccaataag  
 180  
 atctatacgc gcgatgaaat tatcgaagtc accttcggaa tggattatga ggcctttgac  
 240  
 cgtgccattg ataccatat caaaaacatt cgccagaaga ttgaagcgga tccgaaaaac  
 300  
 cccgtctata tccgcacggt ttatggtgtc gggatatctgc ccggaggctt tgatgaagct  
 360  
 t  
 361

<210> 2444  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens



&lt;400&gt; 2444

Xaa Val Arg Ala Ile Leu Arg Arg Thr Pro Ser Arg Glu Asp Glu Lys  
 1 5 10 15  
 Met Leu Gln Thr Ala Asp Gly Arg Leu Arg Ile Asp Ile Glu Ser Met  
 20 25 30  
 Arg Thr Phe Val Glu Gly Lys Glu Val His Leu Thr Lys Asn Glu Phe  
 35 40 45  
 Leu Ile Val Gln Thr Leu Phe Thr His Pro Asn Lys Ile Tyr Thr Arg  
 50 55 60  
 Asp Glu Ile Ile Glu Val Thr Phe Gly Met Asp Tyr Glu Ala Phe Asp  
 65 70 75 80  
 Arg Ala Ile Asp Thr His Ile Lys Asn Ile Arg Gln Lys Ile Glu Ala  
 85 90 95  
 Asp Pro Lys Asn Pro Val Tyr Ile Arg Thr Val Tyr Gly Val Gly Tyr  
 100 105 110  
 Leu Pro Gly Gly Phe Asp Glu Ala  
 115 120

&lt;210&gt; 2445

&lt;211&gt; 403

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2445

agatctgttg aatgaagcag gtgccactta gacattcact tcactgactc caaccacaac  
 60  
 ctcccccttca tttgatatcc tgctcttggc agaaggatgg agaaagagca tcgcacaaag  
 120  
 aggaagcatg tttatcctgt tcagattact gcttctgccca ggctgctgct gctgttgggt  
 180  
 tctgcacatt tgctctttat taagcaaatg tcagagctgg gtgctggcaa gggaatcccc  
 240  
 tgtatttaca caggtaaacc tgagagccag agggccccaa accatcctgg ctgcgagggg  
 300  
 caagctatta gagttaataa cagtgcactg gcattccttc aaaatcctaa tggaagcata  
 360  
 aataaaaaga ggaaagtccc ctttacccaa gaacctgaaa aan  
 403

&lt;210&gt; 2446

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2446

Met Glu Lys Glu His Arg Thr Lys Arg Lys His Val Tyr Pro Val Gln  
 1 5 10 15  
 Ile Thr Ala Ser Ala Arg Leu Leu Leu Leu Leu Gly Ser Ala His Leu  
 20 25 30  
 Leu Phe Ile Lys Gln Met Ser Glu Leu Gly Ala Gly Lys Gly Ile Pro  
 35 40 45  
 Cys Ile Tyr Thr Gly Lys Pro Glu Ser Gln Arg Ala Pro Asn His Pro  
 50 55 60  
 Gly Cys Glu Gly Gln Ala Ile Arg Val Asn Asn Ser Ala Leu Ala Phe

65                      70                      75                      80  
Leu Gln Asn Pro Asn Gly Ser Ile Asn Lys Lys Arg Lys Val Pro Phe  
                              85                      90                      95  
Thr Gln Glu Pro Glu Lys  
                              100

```
<210> 2447
<211> 744
<212> DNA
<213> Homo sapiens
```

```

<400> 2447
nacgcgcgcga ggtttgccag tcacgggttg cggggtggggc aggtactact caccgtcaat
60
gacctgggtgc ggcccacttc gtaccgcaat gcctgggtcaa ccctcgacac ttgctgggg
120
ttgggcgcgcg tgccgatcgt caacgagaac gacacggctg ccaccggaga aattcggttt
180
ggcgataatg atcggcttgc tgccttggtg gccgagctgg tgcgcgctca agccctcatt
240
ctgctctctg acgttgacgc cttgtacacc gcccatccgg attcaccgga tgctcgtcgc
300
gtggagggttg tggaggacat cgatgcattg gatgtcgata cccataaagc tggttcgggg
360
gtggggaaccg gcggcatgac cacgaaactt gaagccggcc gaatggccac ctgtgccggg
420
gtaccgggtgg tactcgcagc ggcggtggat gccccggacg ttctggttgg tgccccctg
480
ggtacctact tccgcccgc tggcgacgcga cggccccgac ggttgctgtg gttggccgac
540
gctgccaccc cgcaggggaca gatcgtcatc gacgacggag ctgtcgaagc ttgacacag
600
cgtcattcct cgttgttggc ggtgggtgtg actcgggtac acggggattt ccaagcagge
660
gaccagtgga cgatcctggc ctccgacggt cgagttgttg gtcgcggtat cgcccagttc
720
tcccatgatg aggtgcgcgt catg
744

```

```
<210> 2448
<211> 248
<212> PRT
<213> Homo sapiens
```

<400> 2448

Xaa	Ala	Ser	Arg	Phe	Ala	Ser	His	Gly	Leu	Arg	Val	Gly	Gln	Val	Leu
1				5					10					15	
Leu	Thr	Val	Asn	Asp	Leu	Val	Arg	Pro	Thr	Ser	Tyr	Arg	Asn	Ala	Trp
			20					25					30		
Ser	Thr	Leu	Asp	Thr	Leu	Leu	Gly	Leu	Gly	Val	Val	Pro	Ile	Val	Asn
		35					40					45			
Glu	Asn	Asp	Thr	Val	Ala	Thr	Gly	Glu	Ile	Arg	Phe	Gly	Asp	Asn	Asp
	50					55					60				
Arg	Leu	Ala	Ala	Leu	Val	Ala	Glu	Leu	Val	Arg	Ala	Gln	Ala	Leu	Ile

```

65          70          75          80
Leu Leu Ser Asp Val Asp Ala Leu Tyr Thr Ala His Pro Asp Ser Pro
      85          90          95
Asp Ala Arg Arg Val Glu Val Val Glu Asp Ile Asp Ala Leu Asp Val
      100         105         110
Asp Thr His Lys Ala Gly Ser Gly Val Gly Thr Gly Gly Met Thr Thr
      115         120         125
Lys Leu Glu Ala Ala Arg Met Ala Thr Cys Ala Gly Val Pro Val Val
      130         135         140
Leu Ala Ala Ala Val Asp Ala Pro Asp Val Leu Ala Gly Ala Pro Val
      145         150         155         160
Gly Thr Tyr Phe Arg Pro Leu Ala Thr Arg Arg Pro Arg Arg Leu Leu
      165         170         175
Trp Leu Ala Asp Ala Ala Thr Pro Gln Gly Gln Ile Val Ile Asp Asp
      180         185         190
Gly Ala Val Glu Ala Leu Thr Gln Arg His Ser Ser Leu Leu Ala Val
      195         200         205
Gly Val Thr Arg Val His Gly Asp Phe Gln Ala Gly Asp Pro Val Thr
      210         215         220
Ile Leu Ala Ser Asp Gly Arg Val Val Gly Arg Gly Ile Ala Gln Phe
      225         230         235         240
Ser His Asp Glu Val Arg Val Met
      245

```

&lt;210&gt; 2449

&lt;211&gt; 296

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2449

```

gtgcactttg ttacagccct ggaacatgaa cacatgccgt catcaactcc ccaaaatctc
60
ctactgctct cccctctctc ctgggccctg tctatcccc agaggccaga caggccttcc
120
tcgcatgcaa gagtctccct cgccctgccg gacagtggcc tccatctacc tgctgtctt
180
gctggactcc agaacactcc agtcctttcc cccttggggg ttgggggggg ccccccttt
240
ttttccccc ctttccctct tcattccaca ggaggccagc ctcaacatcc cncccc
296

```

&lt;210&gt; 2450

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2450

```

Met Asn Thr Cys Arg His Gln Leu Pro Lys Ile Ser Tyr Cys Ser Pro
1          5          10         15
Leu Leu Pro Gly Pro Cys Pro Ile Pro Arg Gly Gln Thr Gly Leu Pro
20         25         30
Arg Met Gln Glu Ser Pro Ser Pro Cys Arg Thr Val Ala Ser Ile Tyr
35         40         45
Leu Pro Val Leu Leu Asp Ser Arg Thr Leu Gln Ser Phe Pro Pro Trp

```

```

      50              55              60
Gly Leu Gly Gly Ala Pro Pro Phe Phe Pro Pro Leu Ser Leu Phe Ile
65              70              75              80
Pro Gln Glu Ala Ser Leu Asn Ile Pro Xaa
      85              90

```

<210> 2451  
 <211> 589  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2451
naccgctgac tggattgtc aacgggtgag gaatcgagcg gttacgatgt cgggccgatc
60
tgcaacgatg atcttgtgag cgatgtattg accggtgtgt gggccgatct tgtgggccag
120
gagaaggctg tcgggggtcct gcgtcgtgcc gccgaatcgc agccggggcg ctcgtcccat
180acgcatggct cattacgggt cgccttgat caggtcggtc gaatgctgcg      240
aaggcctttg cagcggcgct acagtgcgtc gaccatggat gcgggcagtg caatgcctgt
300
cgaaccngcc tgtcaggcgc ccatacctgac gtcaccctcg tgcgtactga ggcgctgtct
360
attggcgctg attgaggtcg tgaaatgggt ttgttcgagc gggcgatgaa ttcgggtccc
420
cgggggcgctcc ccagggttgt cgtcgtcgaa gatgccgacc gcatcactga acgcggagct
480
gacgccttgc ttaaagctat cgaggagcct gcgccgaaaa ccgtctggtt gctgtgtgcc
540
cctactccag aggacgtcat cgtcacgac aggtcgagat gtcggcgcc
589

```

<210> 2452  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2452
Leu Asp Cys Ser Thr Gly Glu Glu Ser Ser Gly Tyr Asp Val Gly Pro
 1              5              10              15
Ile Cys Asn Asp Asp Leu Val Ser Asp Val Leu Thr Gly Val Trp Ala
      20              25              30
Asp Leu Val Gly Gln Glu Lys Ala Val Gly Val Leu Arg Arg Ala Ala
      35              40              45
Glu Ser Gln Pro Gly Arg Ser Ser His Ala Met Ser His Ala Trp Leu
      50              55              60
Ile Thr Gly Pro Pro Gly Ser Gly Arg Ser Asn Ala Ala Lys Ala Phe
65              70              75              80
Ala Ala Ala Leu Gln Cys Val Asp His Gly Cys Gly Gln Cys Asn Ala
      85              90              95
Cys Arg Thr Xaa Leu Ser Gly Ala His Pro Asp Val Thr Leu Val Arg
      100              105              110
Thr Glu Ala Leu Ser Ile Gly Val Asp
      115              120

```

<210> 2453  
 <211> 695  
 <212> DNA  
 <213> Homo sapiens

<400> 2453  
 nnacgcgtca gccatctgtg agtgtcaca ctatacacac atccccgggc acactcaggg  
 60  
 agattcacac attcctacga gcacacatgt gcctgcatga gttattcccc atgtgaacac  
 120  
 acagggtggc acacgcacat gccctgggt atgctcatgt ccattcatcc atcccagcct  
 180  
 gtgcacgtcc tctactcct gtgttcacac ctatgccaa atgaaccaag ggacacacat  
 240  
 gcacaccctt atgtggtgca cacacactcg tgcacacgga gccacaccag cacatgctca  
 300  
 gaggcatttg tgtgcgtggg catttgacg atgactcaga acggagtatg ggggtggcgcg  
 360  
 gcgtggctgg ggaggtccca tcagcccgcc tctgaaaccc tcccaacctg cccatcctgg  
 420  
 cccaggcact gtgtctccgg cttgggcttc agccccggac cccaggacac cccggacaaa  
 480  
 gaggagctgc tctcgtctga agcctgctac gaatgcagga tcaatggcct ctccctcgg  
 540  
 gaccggccac gacgcagtgc ccacagggac caccagggtga catgggtgct gcactaggca  
 600  
 ggggtggcca gggaatgggt gagtgtggga aagaggctgt ggacccgact tagtcatgtc  
 660  
 agccccccga agaaggagca ccaggctcca gatct  
 695

<210> 2454  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 2454  
 Met Ser Tyr Ser Pro Cys Glu His Thr Gly Trp His Thr His Met Pro  
 1 5 10 15  
 Leu Gly Met Leu Met Ser Ile His Pro Ser Gln Pro Val His Val Leu  
 20 25 30  
 Ser Leu Leu Cys Ser His Leu Cys Pro Asn Glu Pro Arg Asp Thr His  
 35 40 45  
 Ala His Pro Tyr Val Val His Thr His Ser Cys Thr Arg Ser His Thr  
 50 55 60  
 Ser Thr Cys Ser Glu Ala Phe Val Cys Val Gly Ile Cys Ser Met Thr  
 65 70 75 80  
 Gln Asn Gly Val Trp Gly Gly Ala Ala Trp Leu Gly Arg Ser His Gln  
 85 90 95  
 Pro Ala Ser Glu Thr Leu Pro Thr Cys Pro Ser Trp Pro Arg His Cys  
 100 105 110  
 Val Ser Gly Leu Gly Phe Ser Pro Gly Pro Gln Asp Thr Pro Asp Lys  
 115 120 125  
 Glu Glu Leu Leu Ser Ser Glu Ala Cys Tyr Glu Cys Arg Ile Asn Gly

130                      135                      140  
 Leu Ser Pro Arg Asp Arg Pro Arg Arg Ser Ala His Arg Asp His Gln  
 145                      150                      155                      160  
 Val Thr Trp Val Leu His  
                     165

<210> 2455  
 <211> 378  
 <212> DNA  
 <213> Homo sapiens

<400> 2455  
 acgcgtcggc agaagcgta gctgaccgtc ggagccgata tgtcccagg cgtcgtcagc  
 60  
 ggaaccgcgc agaaggaaat ccacgcgctg ccgatcatga aggcgctccc catgggcgtc  
 120  
 aaagaactcg ttctgggcga atcgaagtgg caggacgagt tgatcaacaa cttcatcgtc  
 180  
 gcgctgtttg caggcgtggt gttgctgttc gcggtgctgg tgctgctgta cgggcgcttg  
 240  
 ctgccgccgt tcatcaacgt gatgtcgtg gcggtggcac cgctgggcgg gttgatcggc  
 300  
 ctgtggctga ccaacacgcc gatctcgatg ccggtctata tcggcttgat catgctgctc  
 360  
 ggcacgctcg ccaagaat  
 378

<210> 2456  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 2456  
 Thr Arg Arg Gln Lys Arg Gln Leu Thr Val Gly Ala Asp Leu Ser Pro  
 1                      5                      10                      15  
 Gly Val Val Ser Gly Thr Ala Gln Lys Glu Ile His Ala Leu Pro Ile  
                     20                      25                      30  
 Met Lys Ala Leu Pro Met Gly Val Lys Glu Leu Val Leu Gly Glu Ser  
                     35                      40                      45  
 Lys Trp Gln Asp Glu Leu Ile Asn Asn Phe Ile Val Ala Leu Phe Ala  
                     50                      55                      60  
 Gly Val Val Leu Leu Phe Ala Val Leu Val Leu Leu Tyr Arg Arg Leu  
 65                      70                      75                      80  
 Leu Pro Pro Phe Ile Asn Val Met Ser Leu Ala Val Ala Pro Leu Gly  
                     85                      90                      95  
 Gly Leu Ile Gly Leu Trp Leu Thr Asn Thr Pro Ile Ser Met Pro Val  
                     100                      105                      110  
 Tyr Ile Gly Leu Ile Met Leu Leu Gly Ile Val Ala Lys Asn  
                     115                      120                      125

<210> 2457  
 <211> 754  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2457

cctaggaatt taccaccatc aaagacttac attaaccagc tatccatgaa ctcacctgag  
 60  
 atgagcgaat gtgacatctt gcacactctg cgatggctctt ctgggctccg gatcagctcc  
 120  
 tatgtcaact ggataaagga tcaccttata aaacagggaa tgaaggctga gcatgctagc  
 180  
 tcgcttctag aactggcatc caccactaag tgtagctcag tgaaatatga tgttgaaata  
 240  
 gttagaggaat acttcgctcg acagatctca tccttctgta gtatcgactg tgccaccatc  
 300  
 ttgcagctgc atgaaattcc cagtctgcag tccatctaca cccttgatgc cgcgattcta  
 360  
 aaaggcccag gtcttttttg gatgagcatt tttctaagat ggctgctgag actgacctc  
 420  
 ataagtcgtc tgagattacc aagaacctac ttccagccac gctgcaactc attgacacct  
 480  
 atgcatcggt caccagagcc tatttgctgc aaaactttaa tgaagaggga acaactgaga  
 540  
 aaccttccaa ggagaaactg caaggctttg ctgctgtttt ggctattggc tctagcaggt  
 600  
 gcaaggcaaa tactctgggt ccgacactgg ttcagaattt gccatcgta gtgcagactg  
 660  
 tgtgtgagtc ctggaacaac atcaatacca atgaatttcc caatattgga tcctggcgca  
 720  
 atgcctttgc caatgacacc atcccttcac gcgt  
 754

&lt;210&gt; 2458

&lt;211&gt; 236

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2458

Met	Asn	Ser	Pro	Glu	Met	Ser	Glu	Cys	Asp	Ile	Leu	His	Thr	Leu	Arg
1				5				10						15	
Trp	Ser	Ser	Arg	Leu	Arg	Ile	Ser	Ser	Tyr	Val	Asn	Trp	Ile	Lys	Asp
			20					25					30		
His	Leu	Ile	Lys	Gln	Gly	Met	Lys	Ala	Glu	His	Ala	Ser	Ser	Leu	Leu
		35					40					45			
Glu	Leu	Ala	Ser	Thr	Thr	Lys	Cys	Ser	Ser	Val	Lys	Tyr	Asp	Val	Glu
		50				55					60				
Ile	Val	Glu	Glu	Tyr	Phe	Ala	Arg	Gln	Ile	Ser	Phe	Cys	Ser	Ile	
65					70				75					80	
Asp	Cys	Ala	Thr	Ile	Leu	Gln	Leu	His	Glu	Ile	Pro	Ser	Leu	Gln	Ser
			85						90					95	
Ile	Tyr	Thr	Leu	Asp	Ala	Ala	Ile	Leu	Lys	Gly	Pro	Gly	Leu	Phe	Gly
			100						105				110		
Met	Ser	Ile	Phe	Leu	Arg	Trp	Leu	Leu	Arg	Leu	Ile	Leu	Ile	Ser	Arg
		115					120					125			
Leu	Arg	Leu	Pro	Arg	Thr	Tyr	Phe	Gln	Pro	Arg	Cys	Asn	Ser	Leu	Thr
		130				135					140				
Pro	Met	His	Arg	Ser	Pro	Glu	Pro	Ile	Cys	Cys	Lys	Thr	Leu	Met	Lys

```

145          150          155          160
Arg Glu Gln Leu Arg Asn Leu Pro Arg Arg Asn Cys Lys Ala Leu Leu
          165          170          175
Leu Phe Trp Leu Leu Ala Leu Ala Gly Ala Arg Gln Ile Leu Trp Val
          180          185          190
Arg His Trp Phe Arg Ile Cys His Arg Gln Cys Arg Leu Cys Val Ser
          195          200          205
Pro Gly Thr Thr Ser Ile Pro Met Asn Phe Pro Ile Leu Asp Pro Gly
          210          215          220
Ala Met Pro Leu Pro Met Thr Pro Ser Leu His Ala
225          230          235

```

<210> 2459

<211> 382

<212> DNA

<213> Homo sapiens

<400> 2459

```

accggtgcac agatcggttct ggccgcgtgc actgccccgc tcaagcaaat cgctatcaac
60
gctggtcttg agggcggcgt cgtggctgag aaggctcgtg gtctgccccg aggacagggc
120
ctcaacgcgg ccaatgacga gtatgtcgac atggtagagg ccggcatcat tgacccggcc
180
aaggtgaccc gtteggctct gcagaacgcc gcgtccatcg cgccctgtt cctcaccact
240
gaagccgtca tcgctgacaa gcccgagcct gttaaggctc ccgctggcgg cggtgatatg
300
gacggtatgg gtggcatggg cggcatgatg tgatcgtgta ttgccttcgc tgatttgagt
360
gggatgccac ttgccccag gc
382

```

<210> 2460

<211> 110

<212> PRT

<213> Homo sapiens

<400> 2460

```

Thr Gly Ala Gln Ile Val Leu Ala Ala Cys Thr Ala Pro Leu Lys Gln
1      5      10      15
Ile Ala Ile Asn Ala Gly Leu Glu Gly Gly Val Val Ala Glu Lys Val
20     25     30
Ala Gly Leu Pro Ala Gly Gln Gly Leu Asn Ala Ala Asn Asp Glu Tyr
35     40     45
Val Asp Met Val Glu Ala Gly Ile Ile Asp Pro Ala Lys Val Thr Arg
50     55     60
Ser Ala Leu Gln Asn Ala Ala Ser Ile Ala Ala Leu Phe Leu Thr Thr
65     70     75     80
Glu Ala Val Ile Ala Asp Lys Pro Glu Pro Val Lys Ala Pro Ala Gly
85     90     95
Gly Gly Asp Met Asp Gly Met Gly Gly Met Gly Gly Met Met
100    105    110

```



<210> 2461  
 <211> 558  
 <212> DNA  
 <213> Homo sapiens

<400> 2461  
 tccggacaaa agggttcaat cgaagtatgg ttagcctttt ccaagtcgcc aggacggacc  
 60  
 tgcaatgctg tttgtcgtca tgctcggggg caagcaccca cgggctaaaa tcgaaattca  
 120  
 cgatgtggta ttcgcagtcg cggatacgtc gcaacacacc tacaccaat tgcgcgacgg  
 180  
 ctgggttcggc agccctaagg tgtgcatatc gatgcgtgga tggcgcgcga tggcgcgcac  
 240  
 ggctggaaag tcgaactcag ccagatggcg ccgcctgccg acgcgcacat cctgtacttc  
 300  
 atcaacctcg gcggctacga ggccaacgct tttggcgagg cccatcatta cctgctgggtg  
 360  
 gtcgccccggg acaaacagga agccaagcgc aaggggcagc ggcaaatgtt gcaacactgg  
 420  
 tcccaggccc acaccgatgg cgtaatggat atcgacgact gcttgccgat tgatctggtg  
 480  
 gacggtcgct atgttcacct ggtgcaaggc ccgcaccagc cgatcatcca gcacaacgac  
 540  
 tacatcatcc tgccgcga  
 558

<210> 2462  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 2462  
 Met Val Ser Leu Phe Gln Val Ala Arg Thr Asp Leu Gln Cys Cys Leu  
 1 5 10 15  
 Ser Ser Cys Ser Gly Ala Ser Thr His Gly Leu Lys Ser Lys Phe Thr  
 20 25 30  
 Met Trp Tyr Ser Gln Ser Arg Ile Arg Cys Asn Thr Pro Thr Pro Asn  
 35 40 45  
 Cys Ala Thr Ala Gly Ser Ala Ala Leu Arg Cys Ala Tyr Arg Cys Val  
 50 55 60  
 Asp Gly Arg Arg Trp Arg Arg Arg Leu Glu Ser Arg Thr Gln Pro Asp  
 65 70 75 80  
 Gly Ala Ala Cys Arg Arg Ala Ser Pro Val Leu His Gln Pro Arg Arg  
 85 90 95  
 Leu Arg Gly Gln Arg Phe Trp Arg Gly Pro Ser Leu Pro Ala Gly Gly  
 100 105 110  
 Arg Pro Gly Gln Thr Gly Ser Gln Ala Gln Gly Ala Ala Asn Val  
 115 120 125  
 Ala Thr Leu Val Pro Gly Pro His Arg Trp Arg Asn Gly Tyr Arg Arg  
 130 135 140  
 Leu Leu Ala Asp  
 145

<210> 2463  
 <211> 333  
 <212> DNA  
 <213> Homo sapiens

<400> 2463  
 cccagggggt aagccatgag cctgttgagc caagtggccc gggcgccggt gagcgccaag  
 60  
 ttcggcctgc tgattattct gttatacgtc gcgctggcgc tgtgngcgcc gctgctggcg  
 120  
 ccctatggcg aaaccacaggt ggtgggtgaa ggcttcgcgc cgtggagcgg ccagtttttg  
 180  
 ctgggcaccg ataacctggg gcgcgacatg ttcagccgcc tgatgtacgg cgcgcgcaat  
 240  
 accttgggca ttgccttcct gacgacgacg ctggcgcttc tgcctcgggtg tttgagcggg  
 300  
 ttggtcgcgg cgatcaaggg cggttgggtc gac  
 333

<210> 2464  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2464  
 Met Ser Leu Leu Ser Gln Val Ala Arg Ala Pro Leu Ser Ala Lys Phe  
 1 5 10 15  
 Gly Leu Leu Ile Ile Leu Leu Tyr Val Ala Leu Ala Leu Xaa Ala Pro  
 20 25 30  
 Leu Leu Ala Pro Tyr Gly Glu Thr Gln Val Val Gly Glu Gly Phe Ala  
 35 40 45  
 Pro Trp Ser Gly Gln Phe Leu Leu Gly Thr Asp Asn Leu Gly Arg Asp  
 50 55 60  
 Met Phe Ser Arg Leu Met Tyr Gly Ala Arg Asn Thr Leu Gly Ile Ala  
 65 70 75 80  
 Phe Leu Thr Thr Thr Leu Ala Phe Leu Leu Gly Gly Leu Ser Gly Leu  
 85 90 95  
 Val Ala Ala Ile Lys Gly Gly Trp Val Asp  
 100 105

<210> 2465  
 <211> 434  
 <212> DNA  
 <213> Homo sapiens

<400> 2465  
 nntcatgagg acatttcctt catatttggt ggtggtaaat ccctcctggg acacggggaa  
 60  
 atgaccagag gctggcgggc cacctggcag gaacagatgc cagctctgct gcagccatcg  
 120  
 ccccttgagc ggggtggtct gtgcctcttt ctgcactgct ggtgggtggt gctgttggt  
 180  
 ggggtgatgga taccggctgc cagagatggc tcaggtgccg gctgctgggc tatctcaggc  
 240

actggetgct gggctatctc gggcgccggc tgctgggcta tctcagcgcc tggctgctgc  
 300  
 tgggctgtct cgggtgctgg ctgttgggac gtctcctgtc ctggcactgg gctctcgggt  
 360  
 gctgggtgcc agctgctgcc taccttcac tgggctctgg gcactcactg cactcgggct  
 420  
 tttccatctc cgac  
 434

<210> 2466  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<400> 2466  
 Trp Ile Pro Ala Ala Arg Asp Gly Ser Gly Ala Ser Cys Trp Ala Ile  
 1 5 10 15  
 Ser Gly Thr Gly Cys Trp Ala Ile Ser Gly Ala Gly Cys Trp Ala Ile  
 20 25 30  
 Ser Gly Ala Gly Cys Cys Trp Ala Val Ser Gly Ala Gly Cys Trp Asp  
 35 40 45  
 Val Ser Cys Pro Gly Thr Gly Leu Ser Gly Ala Gly Cys Gln Leu Leu  
 50 55 60  
 Pro Thr Leu His Trp Ala Leu Gly Thr His Cys Thr Arg Ala Phe Pro  
 65 70 75 80  
 Ser Pro

<210> 2467  
 <211> 306  
 <212> DNA  
 <213> Homo sapiens

<400> 2467  
 atggactcca ccggcaccgg agcagggggg aaggggaaga agggagcggc cgggcgcaag  
 60  
 gtcggcgggc caaggaagaa gtcggtgtcg aggtccgtga aggcgggtct ccagttcccc  
 120  
 gtcggcgcga tcgggcgcta cttgaagaag ggccgctacg cgcagcgtgt cggcaccggc  
 180  
 gccccgtct acctcgccgc tgctctcgaa tacctcgccg ctgaggttct ggagctcgcc  
 240  
 ggtaatgctg ccagggacaa caagaagact cgcattattc cgcgccacgt gcttctggcg  
 300  
 atccgg  
 306

<210> 2468  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 2468  
 Met Asp Ser Thr Gly Thr Gly Ala Gly Gly Lys Gly Lys Lys Gly Ala

```

      1             5             10             15
Ala Gly Arg Lys Val Gly Gly Pro Arg Lys Lys Ser Val Ser Arg Ser
      20             25             30
Val Lys Ala Gly Leu Gln Phe Pro Val Gly Arg Ile Gly Arg Tyr Leu
      35             40             45
Lys Lys Gly Arg Tyr Ala Gln Arg Val Gly Thr Gly Ala Pro Val Tyr
      50             55             60
Leu Ala Ala Val Leu Glu Tyr Leu Ala Ala Glu Val Leu Glu Leu Ala
      65             70             75             80
Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His
      85             90             95
Val Leu Leu Ala Ile Arg
      100

```

&lt;210&gt; 2469

&lt;211&gt; 489

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2469

```

gccggcgtgg cacatggctt ccctgaagcc agcattgccc tggccaagga agctttgcag
60
aacagatgag atttcagctg ggacttgcag ccaagtggga tttggccttt tggggagaag
120
ggaaagggca ttcaaaggcc agggacagag tatggtcaaa ggcattggaga tgaggaagag
180
gggaccagag cagagggtca ggttggaag cgagttgggg tcaatctgca aaggggctga
240
cgtgccaggt aaaaaacagg agcacagttt agttttgtcg gatcatttca ggtggaaggg
300
cagtgggaat gttggagaaa acactttttg gtgtcggtac attgaatctg ctcacttata
360
agaataaaac tttatttcat agagttattg tatggctcaa aataggtatg aagaattaag
420
aaaaagaatt ttagatttaa aatgaaaagg cacctacaaa agtagagtgg tagagttacc
480
aacgtggag
489

```

&lt;210&gt; 2470

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2470

```

Met Ala Ser Leu Lys Pro Ala Leu Pro Trp Pro Arg Lys Leu Cys Arg
      1             5             10             15
Thr Asp Glu Ile Ser Ala Gly Thr Cys Ser Gln Val Gly Phe Gly Leu
      20             25             30
Leu Gly Arg Arg Glu Arg Ala Phe Lys Gly Gln Gly Gln Ser Met Val
      35             40             45
Lys Gly Met Glu Met Arg Lys Arg Gly Pro Glu Gln Arg Val Arg Leu
      50             55             60
Glu Ser Glu Leu Gly Ser Ile Cys Lys Gly Ala Asp Val Pro Gly Lys

```

65                      70                      75                      80  
 Lys Gln Glu His Ser Leu Val Leu Ser Asp His Phe Arg Trp Lys Gly  
                                  85                      90                      95  
 Ser Gly Asn Val Gly Glu Asn Thr Phe Trp Cys Arg Tyr Ile Glu Ser  
                                  100                      105                      110  
 Ala His Leu  
                                  115

<210> 2471

<211> 779

<212> DNA

<213> Homo sapiens

<400> 2471

tggccatcct ccgtagacatg tacacttcca atatgccggt gtttgagccg ttcataagatc  
 60  
 ctccacatggt ggcccttgac ttctttcaca gtgaggacct ctgcttcacg aggcataaa  
 120  
 gaagaggagc taaggactat tttgtcatgg gggcgccaat ccactgcacg ttctactata  
 180  
 attctctcat ttcctgagggc aatatcagct ccaagatgtg tccaggagtt cttaggataa  
 240  
 gcactgtaaa gatgaacttt ccataaaacc ccaattgttc ctgggtcaat atgaattcca  
 300  
 ttcatacggg cacaaaagac tccctctgag gctctaagga gaatcagaag cttttgttcc  
 360  
 ttttctaagg gattttctaa agtaccaact ttcagctccc cgctgcaat gaccatgat  
 420  
 gccacactca gaacattgct tctgtccaca ggaagtcta aggtcccat cacatacagc  
 480  
 cctttgaaga attggaaaat ctgtatccac aaggacagtt ctgttgggta aaatgagaac  
 540  
 gtcaccccca gggcctggaa tggattgtt gtatcctccc cagccttctt caacaccttg  
 600  
 ccattgttca gggagggacc attttaaagc tgattcaggg gcagaggtag aagctgaaat  
 660  
 agttgggggc ataccttctc tcacccggag aatgacttga acttggcctt cacctaaaac  
 720  
 cagataggtg agttgcctca gctggctatt gaagaaccag tcacagcctt ggttctggc  
 779

<210> 2472

<211> 181

<212> PRT

<213> Homo sapiens

<400> 2472

Met Thr Phe Ser Phe Tyr Pro Thr Glu Leu Ser Leu Trp Ile Gln Ile  
 1                      5                      10                      15  
 Phe Gln Phe Phe Lys Gly Leu Tyr Val Met Gly Thr Leu Asp Phe Pro  
                                  20                      25                      30  
 Val Asp Arg Ser Asn Val Leu Ser Val Ala Cys Met Val Ile Ala Gly  
                                  35                      40                      45  
 Gly Glu Leu Lys Val Gly Thr Leu Glu Asn Pro Leu Glu Lys Glu Gln

```

      50              55              60
Lys Leu Leu Ile Leu Leu Arg Ala Ser Glu Gly Val Phe Cys Asp Arg
65              70              75              80
Met Asn Gly Ile His Ile Asp Pro Gly Thr Ile Gly Val Tyr Gly Lys
      85              90              95
Val His Leu Tyr Ser Ala Tyr Pro Lys Asn Ser Trp Thr His Leu Gly
      100             105             110
Ala Asp Ile Ala Ser Gly Asn Glu Arg Ile Ile Val Glu Asp Ala Val
      115             120             125
Asp Trp Arg Pro His Asp Lys Ile Val Leu Ser Ser Ser Tyr Glu
      130             135             140
Pro His Glu Ala Glu Val Leu Thr Val Lys Glu Val Lys Gly His His
145             150             155             160
Val Arg Ile Tyr Glu Arg Leu Lys His Arg His Ile Gly Ser Val His
      165             170             175
Val Thr Glu Asp Gly
      180

```

<210> 2473  
 <211> 698  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2473
nngtgcacca agaaatggca gcctgacaag ctggtggtgg tatggactcg gcggaaccga
60
cgcatctgct ccaaggccca cagctggcag ccgnnggcat ccagaaccca taccggggca
120
ccgtggtgtg gatggtacnc tgagaatgtg gacatctctg tgaccctcta cagggaaccca
180
cacgtggacc agtatgaggc caaagagtgg acatttatta ttgaaaatga gtctaagggg
240
cagcggaagg tgctggccac ggccgaggtg gacctggccc gccatgccag ggcccgtgcc
300
ntgtccaagt ccnactgag gctgcggctg aagccaaagt cagtgaagac ggtgcaggct
360
gagctgagcc tcaactcttc cggggtgctg ctgcgggagg gccgtgccac ggacgatgac
420
atgcagagtc tcgcaagcct catgagtgtg aagcctagtg atgtgggcaa cttggatgac
480
tttgcgtgaga gtgatgaaga tgaggctcat ggcccaggag ccccgagggc ccgggctcga
540
gtccccagc caggtgggct cacagcctgc tgtggatcga gactgccaag acctggggag
600
ggaggggttac ccgggccacc agccacttgc tgtgcccgcc ctgtgatggg aactcattac
660
tgcccaggca gtcccaacca acccagcagc ctcaattg
698

```

<210> 2474  
 <211> 232  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 2474

```

Xaa Cys Thr Lys Lys Trp Gln Pro Asp Lys Leu Val Val Val Trp Thr
 1           5           10           15
Arg Arg Asn Arg Arg Ile Cys Ser Lys Ala His Ser Trp Gln Pro Xaa
 20           25           30
Ala Ser Arg Thr His Thr Gly Ala Pro Trp Cys Gly Trp Tyr Xaa Glu
 35           40           45
Asn Val Asp Ile Ser Val Thr Leu Tyr Arg Asp Pro His Val Asp Gln
 50           55           60
Tyr Glu Ala Lys Glu Trp Thr Phe Ile Ile Glu Asn Glu Ser Lys Gly
 65           70           75           80
Gln Arg Lys Val Leu Ala Thr Ala Glu Val Asp Leu Ala Arg His Ala
 85           90           95
Arg Ala Arg Ala Xaa Ser Lys Ser Xaa Leu Arg Leu Arg Leu Lys Pro
100           105           110
Lys Ser Val Lys Thr Val Gln Ala Glu Leu Ser Leu Thr Leu Ser Gly
115           120           125
Val Leu Leu Arg Glu Gly Arg Ala Thr Asp Asp Asp Met Gln Ser Leu
130           135           140
Ala Ser Leu Met Ser Val Lys Pro Ser Asp Val Gly Asn Leu Asp Asp
145           150           155           160
Phe Ala Glu Ser Asp Glu Asp Glu Ala His Gly Pro Gly Ala Pro Glu
165           170           175
Ala Arg Ala Arg Val Pro Gln Pro Gly Gly Leu Thr Ala Cys Cys Gly
180           185           190
Ser Arg Leu Pro Arg Pro Gly Glu Gly Gly Leu Pro Gly Pro Pro Ala
195           200           205
Thr Cys Cys Ala Arg Pro Val Met Gly Thr His Tyr Cys Pro Gly Ser
210           215           220
Pro Asn Gln Pro Ser Ser Leu Asn
225           230

```

&lt;210&gt; 2475

&lt;211&gt; 1251

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2475

```

ngcgcgcccc agatgcaggt gagcaagagg atgctggcgg ggggcgtgag gagcatgccc
60
agccccctcc tggcctgctg gcagcccatc ctectgctgg tgcctgggctc agtgcgtgtca
120
ggctcggcca cgggctgccc gccccgctgc gagtgcctcg cccaggaccg cgctgtgctg
180
tgccaccgca agcgccttgt ggcagtcctc gagggcatcc ccaccgagac gcgcctgctg
240
gacctaggca agaaccgcat caaaacgctc aaccaggacg agttcgccag cttcccgcac
300
ctggaggagc tggagctcaa cgagaacatc gtgagcgccg tggagcccg cgccttcaac
360
aacctcttca acctccggac gctgggtctc cgcagcaacc gcctgaagct catcccgcta
420
ggcgtcttca ctggcctcag caacctgacc aagctggaca tcagcgagaa caagatcggt
480

```

atcctactgg actacatggt tcaggacctg tacaacctca agtcactgga ggttggcgac  
 540  
 aatgacctcg tctacatctc tcaccgcgcc ttcagcggcc tcaacagcct ggagcagctg  
 600  
 acgctggaga aatgcaacct gacctccatc cccaccgagg cgctgtccca cctgcacggc  
 660  
 ctcacgtgcc tgaggctccg gcacctcaac atcaatgcca tccgggacta ctccttcaag  
 720  
 aggctgtacc gactcaaggt cttggagatc tcccactggc cctacttga caccatgaca  
 780  
 cccaactgcc tctacggcct caacctgacg tcctgtcca tcacacactg caatctgacc  
 840  
 gctgtgccct acctggccgt ccgccaccta gtctatctcc gcttctcaa cctctctac  
 900  
 aaccccatca gcaccattga gggctccatg ttgcatgagc tgctccggt gcaggagatc  
 960  
 cagctgggtg gcgggcagct ggccgggtg agccctgcct tccgcggcct caactacctg  
 1020  
 cgctgtctca atgtctctgg caaccagctg accacactgg aggaatcagt cttccactcg  
 1080  
 gtgggcaacc tggagacact catcctggac tccaaccgcg tggcctgcga ctgtcggctc  
 1140  
 ctgtgggtgt tccggcgccg tggcctacaa acttcaaccg gcagcagccc acgtgcgcca  
 1200  
 cgcccagatt tgtccagggg caaggagtgc aaggacttcc ctgatgtgct a  
 1251

&lt;210&gt; 2476

&lt;211&gt; 417

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2476

Xaa	Ala	Pro	Glu	Met	Gln	Val	Ser	Lys	Arg	Met	Leu	Ala	Gly	Gly	Val
1				5					10					15	
Arg	Ser	Met	Pro	Ser	Pro	Leu	Leu	Ala	Cys	Trp	Gln	Pro	Ile	Leu	Leu
			20					25					30		
Leu	Val	Leu	Gly	Ser	Val	Leu	Ser	Gly	Ser	Ala	Thr	Gly	Cys	Pro	Pro
		35					40					45			
Arg	Cys	Glu	Cys	Ser	Ala	Gln	Asp	Arg	Ala	Val	Leu	Cys	His	Arg	Lys
	50					55				60					
Arg	Phe	Val	Ala	Val	Pro	Glu	Gly	Ile	Pro	Thr	Glu	Thr	Arg	Leu	Leu
65					70				75					80	
Asp	Leu	Gly	Lys	Asn	Arg	Ile	Lys	Thr	Leu	Asn	Gln	Asp	Glu	Phe	Ala
			85					90					95		
Ser	Phe	Pro	His	Leu	Glu	Glu	Leu	Glu	Leu	Asn	Glu	Asn	Ile	Val	Ser
		100					105						110		
Ala	Val	Glu	Pro	Gly	Ala	Phe	Asn	Asn	Leu	Phe	Asn	Leu	Arg	Thr	Leu
	115					120					125				
Gly	Leu	Arg	Ser	Asn	Arg	Leu	Lys	Leu	Ile	Pro	Leu	Gly	Val	Phe	Thr
	130				135						140				
Gly	Leu	Ser	Asn	Leu	Thr	Lys	Leu	Asp	Ile	Ser	Glu	Asn	Lys	Ile	Val
145				150					155					160	
Ile	Leu	Leu	Asp	Tyr	Met	Phe	Gln	Asp	Leu	Tyr	Asn	Leu	Lys	Ser	Leu



```

      165      170      175
Glu Val Gly Asp Asn Asp Leu Val Tyr Ile Ser His Arg Ala Phe Ser
      180      185      190
Gly Leu Asn Ser Leu Glu Gln Leu Thr Leu Glu Lys Cys Asn Leu Thr
      195      200      205
Ser Ile Pro Thr Glu Ala Leu Ser His Leu His Gly Leu Ile Val Leu
      210      215      220
Arg Leu Arg His Leu Asn Ile Asn Ala Ile Arg Asp Tyr Ser Phe Lys
      225      230      235      240
Arg Leu Tyr Arg Leu Lys Val Leu Glu Ile Ser His Trp Pro Tyr Leu
      245      250      255
Asp Thr Met Thr Pro Asn Cys Leu Tyr Gly Leu Asn Leu Thr Ser Leu
      260      265      270
Ser Ile Thr His Cys Asn Leu Thr Ala Val Pro Tyr Leu Ala Val Arg
      275      280      285
His Leu Val Tyr Leu Arg Phe Leu Asn Leu Ser Tyr Asn Pro Ile Ser
      290      295      300
Thr Ile Glu Gly Ser Met Leu His Glu Leu Leu Arg Leu Gln Glu Ile
      305      310      315      320
Gln Leu Val Gly Gly Gln Leu Ala Gly Trp Ser Pro Ala Phe Arg Gly
      325      330      335
Leu Asn Tyr Leu Arg Val Leu Asn Val Ser Gly Asn Gln Leu Thr Thr
      340      345      350
Leu Glu Glu Ser Val Phe His Ser Val Gly Asn Leu Glu Thr Leu Ile
      355      360      365
Leu Asp Ser Asn Pro Leu Ala Cys Asp Cys Arg Leu Leu Trp Val Phe
      370      375      380
Arg Arg Arg Gly Leu Gln Thr Ser Thr Gly Ser Ser Pro Arg Ala Pro
      385      390      395      400
Arg Pro Ser Leu Ser Arg Gly Lys Glu Phe Lys Asp Phe Pro Asp Val
      405      410      415
Leu

```

&lt;210&gt; 2477

&lt;211&gt; 548

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2477

```

nagactgcga tcagacgcgc gtgccagct gaaccaggtg cgtgagaagg ctgccttcag
60
gtggccgggg gctccctcca gctgtctctg gacggaggga cgggaagtgg ccagaagggg
120
aagtgtgagg agttcccgtc cagcctgtca tcagtctccc caggtcttga agcggcggcc
180
ctgctcctgg ccgtgacctt ggaccctctg gagaccctta tcaaggatgg catcctctac
240
cagcagcatg tcaagtttgg caagaagtgc tggcggaagg tgtgggctct gctgtatgca
300
ggaggcccat caggcgtggc acggctggag aactgggagg tccgggatgg tggcctggga
360
gcagcgggtg acaggtcggc ggggcctggc cggcgagggg agcgacgggt catccgcctg
420

```

gctgactgtg tgtccgtgct gccggctgac ggcgagagct gcccccgga caccggtgcc  
 480  
 ttcttgetca ccaccaccga gcgaagccat ctactggctg ctcagcaccg ccaggcctgg  
 540  
 atggggccc  
 548

<210> 2478<211> 113

<212> PRT

<213> Homo sapiens

<400> 2478

Leu	Glu	Thr	Pro	Ile	Lys	Asp	Gly	Ile	Leu	Tyr	Gln	Gln	His	Val	Lys
1				5				10					15		
Phe	Gly	Lys	Lys	Cys	Trp	Arg	Lys	Val	Trp	Ala	Leu	Leu	Tyr	Ala	Gly
		20					25					30			
Gly	Pro	Ser	Gly	Val	Ala	Arg	Leu	Glu	Asn	Trp	Glu	Val	Arg	Asp	Gly
		35					40				45				
Gly	Leu	Gly	Ala	Ala	Gly	Asp	Arg	Ser	Ala	Gly	Pro	Gly	Arg	Arg	Gly
	50					55				60					
Glu	Arg	Arg	Val	Ile	Arg	Leu	Ala	Asp	Cys	Val	Ser	Val	Leu	Pro	Ala
65				70					75					80	
Asp	Gly	Glu	Ser	Cys	Pro	Arg	Asp	Thr	Gly	Ala	Phe	Leu	Leu	Thr	Thr
			85					90					95		
Thr	Glu	Arg	Ser	His	Leu	Leu	Ala	Ala	Gln	His	Arg	Gln	Ala	Trp	Met
			100				105						110		

Gly

<210> 2479

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2479

gaattcatgg aggtctatga ggaggatgaa gaatatgcgt atgaaaaata tgaaacccat  
 60  
 ttccggcacga gctggatgga ggagaccgca ggcaccttct cactgaactg gtatcgcagc  
 120  
 aggtactgga atgacaatga agcagcagaa aggcttgcgt tgatgtgggc taaaaccttc  
 180  
 aaatatgcgt cgataaacgt ctcttggcag accgggatta gcaatagcga cgacgagggc  
 240  
 aatgaagatg aagacatgtt ctacgccggt atctccattc cgctgggagg cggggcgtac  
 300  
 tctaactcct ggtatcgtga atat  
 324

<210> 2480

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2480

Glu Phe Met Glu Val Tyr Glu Glu Asp Glu Glu Tyr Ala Tyr Glu Lys  
 1 5 10 15  
 Tyr Glu Thr His Phe Gly Thr Ser Trp Met Glu Glu Thr Ala Gly Thr  
 20 25 30  
 Phe Ser Leu Asn Trp Tyr Arg Ser Arg Tyr Trp Asn Asp Asn Glu Ala  
 35 40 45  
 Ala Glu Arg Leu Ala Leu Met Trp Ala Lys Thr Phe Lys Tyr Ala Ser  
 50 55 60  
 Ile Asn Val Ser Trp Gln Thr Gly Ile Ser Asn Ser Asp Asp Glu Gly  
 65 70 75 80  
 Asn Glu Asp Glu Asp Met Phe Tyr Ala Gly Ile Ser Ile Pro Leu Gly  
 85 90 95  
 Gly Gly Ala Tyr Ser Asn Ser Trp Tyr Arg Glu Tyr  
 100 105

&lt;210&gt; 2481

&lt;211&gt; 484

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2481

gcgttcacta acgcttcaac aaactcttac aagcgtcttg ttcctgggtt cgaagcacct  
 60  
 gttatgttgg cttactcagc tcgtaaccgt tctgcttcta tccgtatccc atacgttgca  
 120  
 agccctaaag gcaagcgtat tgaagctcgt ttcctgatac caaccgctaa cccataccta  
 180  
 gcattttcag ctatgttgat ggctggtatc gatggtatca aaaacaagat tcaccctggc  
 240  
 gatgcagcag acaaagattt gtacgacctt ccagctgaag aagcagccgc tatccctcaa  
 300  
 gttgctagca gcttagaaga agcgtttaag tgcctagatc aagaccgtga gttcttgact  
 360  
 caaggtggcg ttttctctga cgacatgac gatgcttaca tcgctcttaa agcagaagaa  
 420  
 gcacagcgtg ttgcaatgac aacaacacca cttgagttcg aactttacta cagcctataa  
 480  
 gctt  
 484

&lt;210&gt; 2482

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2482

Ala Phe Thr Asn Ala Ser Thr Asn Ser Tyr Lys Arg Leu Val Pro Gly  
 1 5 10 15  
 Phe Glu Ala Pro Val Met Leu Ala Tyr Ser Ala Arg Asn Arg Ser Ala  
 20 25 30  
 Ser Ile Arg Ile Pro Tyr Val Ala Ser Pro Lys Gly Lys Arg Ile Glu  
 35 40 45  
 Ala Arg Phe Pro Asp Pro Thr Ala Asn Pro Tyr Leu Ala Phe Ser Ala  
 50 55 60

Met Leu Met Ala Gly Ile Asp Gly Ile Lys Asn Lys Ile His Pro Gly  
 65 70 75 80  
 Asp Ala Ala Asp Lys Asp Leu Tyr Asp Leu Pro Ala Glu Glu Ala Ala  
 85 90 95  
 Ala Ile Pro Gln Val Ala Ser Ser Leu Glu Glu Ala Leu Lys Cys Leu  
 100 105 110  
 Asp Gln Asp Arg Glu Phe Leu Thr Gln Gly Gly Val Phe Ser Asp Asp  
 115 120 125  
 Met Ile Asp Ala Tyr Ile Ala Leu Lys Ala Glu Glu Ala Gln Arg Val  
 130 135 140  
 Ala Met Thr Thr Thr Pro Leu Glu Phe Glu Leu Tyr Tyr Ser Leu  
 145 150 155

<210> 2483

<211> 477

<212> DNA

<213> Homo sapiens

<400> 2483

acgcgtgtta gccaaatctt ggttcctccc gttctctcct taccagagcc tgaggccctt  
 60  
 ctggagaaca ggcagcctct gaggaaacct ctgatccccg atcagccacc ccatcgccctg  
 120  
 cgtccccagc cgcttcctcc tggccttggt ccccttccc tgtgaaggag agaacagttt  
 180  
 cggtctggccc tgagatgctg gcaggcctgc agtcagggca gtgggcgcct cccaccttga  
 240  
 aatggctcctt cgtggtgcag ttctgcttac ggggtagact ttgttgctt ccacagagga  
 300  
 cagttagggt gggcaggaag gaagtctctg ccacaagtct gcattccagg ctgtttccag  
 360  
 aagtgggaat tctctcgtgc cctggagtct gggaatgcat ttttagtttc ccagcttcag  
 420  
 gtagaattga aattgagtga gccaaaccac cacatccatc tggagccagg aactagt  
 477

<210> 2484

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2484

Met His Ser Gln Thr Pro Gly His Glu Arg Ile Pro Thr Ser Gly Asn  
 1 5 10 15  
 Ser Leu Glu Cys Arg Leu Val Ala Glu Thr Ser Phe Leu Pro Thr Leu  
 20 25 30  
 Thr Val Leu Cys Gly Arg Gln Gln Ser Leu Pro Arg Lys Gln Asn Cys  
 35 40 45  
 Thr Thr Lys Asp His Phe Lys Val Gly Gly Ala His Cys Pro Asp Cys  
 50 55 60  
 Arg Pro Ala Ser Ile Ser Gly Pro Ala Glu Thr Val Leu Ser Phe Thr  
 65 70 75 80  
 Gly Lys Gly Glu Gln Gly Gln Glu Glu Ala Ala Gly Asp Ala Gly Asp  
 85 90 95

Gly Val Ala Asp Arg Gly Ser Glu Val Ser Ser Glu Ala Ala Cys Ser  
                   100                  105                  110  
 Pro Glu Gly Pro Gln Ala Arg Val Arg Arg Glu Arg Glu Glu Pro Arg  
                   115                  120                  125  
 Phe Gly  
       130

<210> 2485  
 <211> 608  
 <212> DNA  
 <213> Homo sapiens

<400> 2485  
 accggtgagg cgaagtgcgg tggcaattac gcagcttcgc tgcgttccca gatcgatgcc  
 60  
 aagaccgcg actgcaacga ggtgctcttt gtcgatgcag ttgaacatcg ctggatcgag  
 120  
 gagctgggtg gtatgaactt catggccatc agcaaagacg gtcagctcgt caccctcgag  
 180  
 ctagctggca ccatactgcg tggcgtgacc cgcaagtcca ttctggaagt tgccccgac  
 240  
 ctcggtcttg aaccagtgga gcgcaagatc gatgttgacg agctccttga tggcgttcgc  
 300  
 tctggcgagt tcccgaagt ctctgcctgt ggtaccgccg cggttggtcac accgatcggc  
 360  
 tctttcctag atggagatac cgacgtgaag gtctctgagc ccaccggaaa gaccacgatg  
 420  
 gagatccgtc gccgtctgct ggatatccag ttcggacgcg ctgaggacac ccatggctgg  
 480  
 ttgaagcgag tctgctgacg gcgtcgacga ccattggggc cggecccaat gatgtgttca  
 540  
 cgatcgggct acgacggtgt cgatgacaat gtcttgccgc tggaagggtt gcccgacggt  
 600  
 gaacgcgt  
 608

<210> 2486  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 2486  
 Thr Gly Glu Ala Lys Cys Gly Gly Asn Tyr Ala Ala Ser Leu Arg Ser  
   1                  5                  10                  15  
 Gln Ile Asp Ala Lys Thr Arg Asp Cys Asn Glu Val Leu Phe Val Asp  
           20                  25                  30  
 Ala Val Glu His Arg Trp Ile Glu Glu Leu Gly Gly Met Asn Phe Met  
           35                  40                  45  
 Ala Ile Ser Lys Asp Gly Gln Leu Val Thr Pro Glu Leu Ala Gly Thr  
   50                  55                  60  
 Ile Leu Arg Gly Val Thr Arg Lys Ser Ile Leu Glu Val Ala Pro Asp  
   65                  70                  75                  80  
 Leu Gly Leu Glu Pro Val Glu Arg Lys Ile Asp Val Asp Glu Leu Leu  
           85                  90                  95

Asp Gly Val Arg Ser Gly Glu Phe Pro Glu Val Phe Ala Cys Gly Thr  
 100 105 110  
 Ala Ala Val Val Thr Pro Ile Gly Ser Phe Leu Asp Gly Asp Thr Asp  
 115 120 125  
 Val Lys Val Ser Glu Pro Thr Gly Lys Thr Thr Met Glu Ile Arg Arg  
 130 135 140  
 Arg Leu Leu Asp Ile Gln Phe Gly Arg Ala Glu Asp Thr His Gly Trp  
 145 150 155 160  
 Leu Lys Arg Val Cys  
 165

&lt;210&gt; 2487

&lt;211&gt; 339

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2487

nnccctcag gagagcagcc catggaaggt ccccccaag gggccctga gagccctgac  
 60  
 agtctgcaaa gaaaccagaa agagctccag ggcctcctga cccaggtgca agccctggag  
 120  
 aaggaggccg caagcagtgt ggacgtgcag gccctgcgga ggctctttga ggccgtgccc  
 180  
 cagctgggag gggctgctcc tcaggctcct gctgcccacc aaaagcccga ggcctcagtg  
 240  
 gagcaggcct ttggggagct gacacgggtc agcacggaag ttgctcaact gaaggaacag  
 300  
 accttggtaa ggctgctgga cattgaagag gctgtgcac  
 339

&lt;210&gt; 2488

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2488

Xaa Pro Ser Gly Glu Gln Pro Met Glu Gly Pro Pro Gln Gly Ala Pro  
 1 5 10 15  
 Glu Ser Pro Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu  
 20 25 30  
 Leu Thr Gln Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp  
 35 40 45  
 Val Gln Ala Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly  
 50 55 60  
 Ala Ala Pro Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val  
 65 70 75 80  
 Glu Gln Ala Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln  
 85 90 95  
 Leu Lys Glu Gln Thr Leu Val Arg Leu Leu Asp Ile Glu Glu Ala Val  
 100 105 110  
 His

&lt;210&gt; 2489

<211> 594  
 <212> DNA  
 <213> Homo sapiens

<400> 2489  
 nacgcgttct tcggactggc gacgatgctg atttctatcc cgacgggggt gaagctatct  
 60  
 aactggctgg tcaccatcta tcacggccgg gtgcgtatca ccagccaggt tctttggacc  
 120  
 ctgggcttca tgggtgacctt cgcgatcgga ggcatgaccg gcgtactgct ggccatcccg  
 180  
 ggtgctgact tcgtactgca caacagcctg ttcggaattg ctcacttcca caacgtgatc  
 240  
 atcggcgccg cagtattcgg ctacatcgca ggtttcagct tctacttccc gaaagcgctc  
 300  
 ggcttcaagc tgcacgaaag ctggggcaag gctgcattct ggttctggat ctcgggcttc  
 360  
 ttctgctcgt tcatgccgct ctatgcactg ggtttcatgg gcatgaccgg ttgtttgaac  
 420  
 gcccccccca cccctgagtg ggtcccgtag ctgtacgttg ccatggtcgg tgcatgatg  
 480  
 atcgtgtcgt gtatcgctg ccagttgatt cagctgtatg tcagcgtgcy tgatcgcaag  
 540  
 cagaacatgt gcgaatccgg cgacccatgg aatgcacaca ccctggaatg gtcg  
 594

<210> 2490  
 <211> 198  
 <212> PRT  
 <213> Homo sapiens

<400> 2490  
 Xaa Ala Phe Phe Gly Leu Ala Thr Met Leu Ile Ser Ile Pro Thr Gly  
 1 5 10 15  
 Val Lys Leu Phe Asn Trp Leu Val Thr Ile Tyr His Gly Arg Val Arg  
 20 25 30  
 Ile Thr Ser Gln Val Leu Trp Thr Leu Gly Phe Met Val Thr Phe Ala  
 35 40 45  
 Ile Gly Gly Met Thr Gly Val Leu Leu Ala Ile Pro Gly Ala Asp Phe  
 50 55 60  
 Val Leu His Asn Ser Leu Phe Gly Ile Ala His Phe His Asn Val Ile  
 65 70 75 80  
 Ile Gly Gly Ala Val Phe Gly Tyr Ile Ala Gly Phe Ser Phe Tyr Phe  
 85 90 95  
 Pro Lys Ala Phe Gly Phe Lys Leu His Glu Ser Trp Gly Lys Ala Ala  
 100 105 110  
 Phe Trp Phe Trp Ile Ser Gly Phe Phe Val Ala Phe Met Pro Leu Tyr  
 115 120 125  
 Ala Leu Gly Phe Met Gly Met Thr Arg Cys Leu Asn Ala Pro Pro Thr  
 130 135 140  
 Pro Glu Trp Val Pro Tyr Leu Tyr Val Ala Met Val Gly Ala Leu Met  
 145 150 155 160  
 Ile Ala Val Gly Ile Ala Cys Gln Leu Ile Gln Leu Tyr Val Ser Val  
 165 170 175

Arg Asp Arg Lys Gln Asn Met Cys Glu Ser Gly Asp Pro Trp Asn Ala  
                   180                  185                  190  
 His Thr Leu Glu Trp Ser  
                   195

<210> 2491

<211> 592

<212> DNA

<213> Homo sapiens

<400> 2491

acgcgtcacg caactgtcaa acttgccaat ccgcttgacg atactcgccc ctacctacgc  
 60  
 actacgttgt tgcttggtct attccatgca gtaacgacga atatgtcgcg atctcaggat  
 120  
 gatcttgacg tggtcgaaag cggaaactgta ttccgcgcgc tcaactccggc tgcggcacccg  
 180  
 cgtcccggtg tcgacgagcg cccctccgat gaagtccttg ccgagatcga cgccgccttg  
 240  
 ccagcccagc cgcgcgatgct cgcggccgtg atctgtggca gctggctgcc cgatcgctgg  
 300  
 gatggagagt cggccaaggc tgactggcga cacgctgtgc tggtcgcccga gaaggctgct  
 360  
 gatgctcttg gcgtgaggct ggtgcgcaag gctgaccgtc aggtccatg gcatcccgtg  
 420  
 cgttggtgagg ctctcatcgt cgatgggaag gtcattggcc atgctggtga gttgcacccc  
 480  
 acagtagtgt cgaaggctgg tctgcctcag cgcacctgtg cggtcgagtt caatctagat  
 540  
 gctttggtag cctgcgctcc gacgggtggt gaggtcatgg ttatttcaag gt  
 592

<210> 2492

<211> 197

<212> PRT

<213> Homo sapiens

<400> 2492

Thr	Arg	His	Ala	Thr	Val	Lys	Leu	Ala	Asn	Pro	Leu	Asp	Asp	Thr	Arg
1				5					10					15	
Pro	Tyr	Leu	Arg	Thr	Thr	Leu	Leu	Pro	Gly	Leu	Phe	His	Ala	Val	Thr
		20						25					30		
Thr	Asn	Met	Ser	Arg	Ser	Gln	Asp	Asp	Leu	Ala	Val	Phe	Glu	Ser	Gly
		35				40						45			
Thr	Val	Phe	Arg	Ala	Val	Thr	Pro	Ala	Ala	Ala	Pro	Arg	Pro	Gly	Val
	50					55					60				
Asp	Glu	Arg	Pro	Ser	Asp	Glu	Val	Leu	Ala	Glu	Ile	Asp	Ala	Ala	Leu
65				70						75				80	
Pro	Ala	Gln	Pro	Arg	Met	Leu	Ala	Ala	Val	Ile	Cys	Gly	Ser	Trp	Leu
			85					90						95	
Pro	Asp	Arg	Trp	Asp	Gly	Glu	Ser	Val	Lys	Ala	Asp	Trp	Arg	His	Ala
		100						105						110	
Val	Leu	Val	Ala	Gln	Lys	Ala	Ala	Asp	Ala	Leu	Gly	Val	Arg	Leu	Val
		115					120							125	



Arg Lys Ala Asp Arg Gln Ala Pro Trp His Pro Gly Arg Cys Ala Ala  
 130 135 140  
 Leu Ile Val Asp Gly Lys Val Ile Gly His Ala Gly Glu Leu His Pro  
 145 150 155 160  
 Thr Val Val Ser Lys Ala Gly Leu Pro Gln Arg Thr Cys Ala Val Glu  
 165 170 175  
 Phe Asn Leu Asp Ala Leu Val Ala Cys Ala Pro Ser Gly Gly Glu Val  
 180 185 190  
 Met Val Ile Ser Arg  
 195

&lt;210&gt; 2493

&lt;211&gt; 418

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2493

acgcgtcagg ttgccggtga tcgtgccacc gtcacctcca tgggtgccttc aggagcagac  
 60  
 cccacacact atgagccgctc gctgcgtgac gttcggaccg tcgtgtattc gagagtcgcg  
 120  
 ctatcgaact acctcatgct cgaacctcat tcgggtcatca agaccatcga ctcttcctta  
 180  
 cctacgggat ctatcaatgt ctccctggct gaggaagccc aaaagtacgg cgcacaagtg  
 240  
 atcccgctgg ttgaaaatgc caacctagac accgtgtggc tggggttgcg cgtcattggc  
 300  
 aaggggcgcca ggccggggagc cgaccgctct tcctcggctc acctccagct gacgtcggtg  
 360  
 gaggggcctg gggacttcac tgcctatatc actgggacct ttgggtcgacc tcagatct  
 418

&lt;210&gt; 2494

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2494

Thr Arg Gln Val Ala Gly Asp Arg Ala Thr Val Thr Ser Met Val Pro  
 1 5 10 15  
 Ser Gly Ala Asp Pro His Thr Tyr Glu Pro Ser Leu Arg Asp Val Arg  
 20 25 30  
 Thr Val Val Tyr Ser Arg Val Ala Leu Ser Asn Tyr Leu Met Leu Glu  
 35 40 45  
 Pro His Ser Val Ile Lys Thr Ile Asp Ser Ser Leu Pro Thr Gly Ser  
 50 55 60  
 Ile Asn Val Ser Leu Ala Glu Glu Ala Gln Lys Tyr Gly Ala Gln Val  
 65 70 75 80  
 Ile Pro Leu Val Glu Asn Ala Asn Leu Asp Thr Val Trp Leu Gly Leu  
 85 90 95  
 Arg Val Ile Gly Lys Gly Ala Arg Arg Gly Ala Asp Arg Ser Ser  
 100 105 110  
 Val Tyr Leu Gln Leu Thr Ser Val Glu Gly Pro Gly Asp Phe Thr Ala  
 115 120 125

Tyr Ile Thr Gly Thr Phe Gly Arg Pro Gln Ile  
 130 135

<210> 2495

<211> 1478

<212> DNA

<213> Homo sapiens

<400> 2495

```

nnggcctggc ccagttgcac caccagcgct gcggacactc ggggcggcag tcggtctgtc
60
agtcctcccg ccaggtcccg cggcccgcac ctgccgcccg cacctgcagc tccgcacctg
120
cggccagtgc ctactgccct ctcttgccgc ccgcacctgc agccccgcac ctgccgcttg
180
cacctgcagc cccgcgctct acccggttca agcatggctg accaggcgcc cttcgacacg
240
gacgtcaaca cctgacccg cttcgtcatg gaggagggca ggaaggcccg cggcacgggc
300
gagttgacct agctgtctaa ctgctctgac acagcagtca aagccatctc ttcggcggtg
360
cgcaaggcgg gcatcgcgca cctctatggc attgctgggt ctaccaacgt gacaggtgat
420
caagttaaga agctggacgt cctctccaac gacctggtta tgaacatggt aaagtcatcc
480
tttgccacgt gtgttctcgt gtcagaagaa gataaacacg ccatcatagt ggaaccggag
540
aaaaggggta aatatgtggt ctgttttgat ccccttgatg gatcttccaa catcgattgc
600
cttgtgtccg ttggaaccat ttttggtatc tatagaaaga aatcaactga tgagccttct
660
gagaaggatg ctctgcaacc aggcgggaac ctggtggcag cgggctacgc actgtatggc
720
agtgccacca tgctggtcct tgccatggac tgtgggggtca actgcttcat gctggaccgc
780
gccatcgggg agttcatttt ggtggacaag gatgtgaaga taaaaaagaa aggtaaaatc
840
tacagcetta acgagggtta cgccaaggac tttgacctg ccgtcactga gtacatccag
900
aggaagaagt tccccccaga taattcagct ccttatgggg cccggtatgt gggctccatg
960
gtggctgatg ttcatcgcac tctggtctac ggagggatat ttctgtacct cgctaacaag
1020
aagagcccca atggaaagct gagactgctg tacgaatgca accccatggc ctacgtcatg
1080
gagaaggctg ggggaatggc caccactggg aaggaggccg tgtagacgt cattccaca
1140
gacattcacc agaggcgccc ggtgatcttg gggcccccg acgacgtgct cgagttcctg
1200
aaggtgtatg agaagcactc tgcccagtga gcacctgccc tgctgcac cggagaattg
1260
cctctacctg gaccttttgt ctcacacagc agtaccctga cctgctgtgc accttacatt
1320

```



1794

&lt;400&gt; 2499

nggccgggag aagacccgtt ctatatggcc taccacgaca ccgagtgggg cgtgccggaa  
 60  
 tatgacgacc gcgcattgta cgagaagctc attctcgacg gattccaggc cggcctgtcg  
 120  
 tggatcacca tcctgcgcaa gcgcgacaac tttcgcaaag ccttcgacga tttccagccc  
 180  
 gagaagatag cgcgttacaa tgagaagaag gttcacgcgc tgatgaacga tgccggcatc  
 240  
 gtgcgcaacc gcgccaagat cgaaggcagc atcgccagcg cgaaggcgta tctcgacatc  
 300  
 atggaaaaag gcccgggcct ctccaggctg ctgtgggact tcgtcgac  
 348

&lt;210&gt; 2500

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2500

Xaa Pro Gly Glu Asp Pro Phe Tyr Met Ala Tyr His Asp Thr Glu Trp  
 1 5 10 15  
 Gly Val Pro Glu Tyr Asp Asp Arg Ala Leu Tyr Glu Lys Leu Ile Leu  
 20 25 30  
 Asp Gly Phe Gln Ala Gly Leu Ser Trp Ile Thr Ile Leu Arg Lys Arg  
 35 40 45  
 Asp Asn Phe Arg Lys Ala Phe Asp Asp Phe Gln Pro Glu Lys Ile Ala  
 50 55 60  
 Arg Tyr Asn Glu Lys Lys Val His Ala Leu Met Asn Asp Ala Gly Ile  
 65 70 75 80  
 Val Arg Asn Arg Ala Lys Ile Glu Gly Thr Ile Ala Ser Ala Lys Ala  
 85 90 95  
 Tyr Leu Asp Ile Met Glu Lys Gly Pro Gly Phe Ser Arg Leu Leu Trp  
 100 105 110  
 Asp Phe Val Asp  
 115

&lt;210&gt; 2501

&lt;211&gt; 569

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2501

gaattcgatt ctttctgggc aaatgcttac aatttgatga ttgtaacca tcaaatcaca  
 60  
 taatgcccat taagccactc catacacttc tttaaataagg aaaatatatg taaagtacgt  
 120  
 acttagcaca gggcctgacc tatagtaatg gtcaagaatg atagcggggg tgaggatatg  
 180  
 ctttcaagag tcaaacaatt ttaactggtgc atcatttcca tttattcttt ctcttttgca  
 240  
 taataaaacc actcttaaga ttctaccttg gttagttaga gacaacagtt ctctggaaag  
 300

tagattctat agcttcaact ccctgaagag atgtgtgcta atttacaatca aaaaaatcct  
 360  
 taaggggtata aaatatgccca agaactgtca acatcacaga ttaccactgg tagcttctgg  
 420  
 tatattgtta agtttccact taatttttaa gggacactag agaattagta tgactcacct  
 480  
 acactaagtt tatatactgt atttaacagt gtaattttca aatatgacag gaataaccca  
 540  
 gatgtgaaat gctgaatcat taatcacag  
 569

<210> 2502  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2502  
 Met Ile Ala Gly Val Arg Tyr Gly Phe Gln Glu Ser Asn Asn Phe Thr  
 1 5 10 15  
 Gly Ala Ser Phe Pro Phe Ile Leu Ser Leu Leu His Asn Lys Thr Thr  
 20 25 30  
 Leu Lys Ile Leu Pro Trp Leu Val Arg Asp Asn Ser Ser Leu Glu Ser  
 35 40 45  
 Arg Phe Tyr Ser Phe Asn Ser Leu Lys Arg Cys Val Leu Ile Tyr Ile  
 50 55 60  
 Lys Lys Ile Leu Lys Gly Ile Lys Tyr Ala Lys Asn Cys Gln His His  
 65 70 75 80  
 Arg Leu Pro Leu Val Ala Ser Gly Ile Leu Leu Ser Phe His Leu Ile  
 85 90 95  
 Phe Lys Gly His  
 100

<210> 2503  
 <211> 419  
 <212> DNA  
 <213> Homo sapiens

<400> 2503  
 gccacgccag ccattctaccc ttctctcgac tcgccaaata agtattcact gaacatgtac  
 60  
 aaggccttgc tacctcagca gtctacagc ttggcccagc cgctgtattc tccagtctgc  
 120  
 accaatgggg agecgtttct ctacctgccg ccacctcact acgtcgggtcc ccacatccca  
 180  
 tcgtccttgg catcacccat gaggtctctg acaccttcgg cctccccagc catcccgct  
 240  
 ctctgccatt gcgcagacaa aagcctcccg tggaagatgg gcgtcagccc tgggaatcct  
 300  
 gttgattccc acgcctatcc tcacatccag aacagtaagc agcccagggt tccctctgcc  
 360  
 aaggcgggtca ccagtggcct gccggggggac acagctctcc tgttgcccc ctcacgcgt  
 419

<210> 2504

<211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 2504  
 Met Tyr Lys Ala Leu Leu Pro Gln Gln Ser Tyr Ser Leu Ala Gln Pro  
 1 5 10 15  
 Leu Tyr Ser Pro Val Cys Thr Asn Gly Glu Arg Phe Leu Tyr Leu Pro  
 20 25 30  
 Pro Pro His Tyr Val Gly Pro His Ile Pro Ser Ser Leu Ala Ser Pro  
 35 40 45  
 Met Arg Leu Ser Thr Pro Ser Ala Ser Pro Ala Ile Pro Pro Leu Val  
 50 55 60  
 His Cys Ala Asp Lys Ser Leu Pro Trp Lys Met Gly Val Ser Pro Gly  
 65 70 75 80  
 Asn Pro Val Asp Ser His Ala Tyr Pro His Ile Gln Asn Ser Lys Gln  
 85 90 95  
 Pro Arg Val Pro Ser Ala Lys Ala Val Thr Ser Gly Leu Pro Gly Asp  
 100 105 110  
 Thr Ala Leu Leu Leu Pro Pro Ser Arg  
 115 120

<210> 2505  
 <211> 540  
 <212> DNA  
 <213> Homo sapiens

<400> 2505  
 tccggagcca atccgactca ggccctcgtc tggagccagg tgetgttgag catgggggttg  
 60  
 ccgctcgtgt tgggtgccgtt ggctcgggttc accggcgatc ggcgtctgat gggccaatgg  
 120  
 acgaatgggc gtgtcatggc cgccatcgcg tggatcgctg tggcagcagt ctcggctctc  
 180  
 aacgtgggtc tcgtcgtcga gacgggtcatg ggtgcatgat ccttgagggc agttttctgg  
 240  
 cgacaatcgt gaaaatgagt gacaaactca agcgggtgac gacgccgaac cccgcaccga  
 300  
 cctctgcccc cgagctagcc aacgatttgg ccaactgcatt tcgcgggtac cctgctggag  
 360  
 tggcgatcct cacgacgatg ggagcggctg ggcccagagg cttgacggtc tcctccctgg  
 420  
 cgtcgggtgc agtcgtcccc gctgttgtgt cgggtgctgtt gggtaatggt tcgacgaccc  
 480  
 tggccaccct gacggaggag tcccgcgtca tcgtccacat gcttgatgca gatcgcgcgc  
 540

<210> 2506  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 2506  
 Ser Gly Ala Asn Pro Thr Gln Ala Leu Val Trp Ser Gln Val Leu Leu

1	5	10	15
Ser Met Gly Leu Pro Leu Val Leu Val Pro Leu Ala Arg Phe Thr Gly			
	20	25	30
Asp Arg Arg Leu Met Gly Gln Trp Thr Asn Gly Arg Val Met Ala Ala			
	35	40	45
Ile Ala Trp Ile Val Val Ala Ala Val Ser Ala Leu Asn Val Val Leu			
	50	55	60
Val Val Glu Thr Val Met Gly Ala			
65	70		

&lt;210&gt; 2507

&lt;211&gt; 922

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2507

nacgcgtgaa gggcagagga gagagaccag tgaaggggga ggaggcggcc aaaaggagac  
 60  
 agcttcatgc cccaggaca taaatagccc ggctgctgca ggtacctgaa ggagttcagg  
 120  
 acggagcagt gccccctgtt ttcacagcac aagtgcgcgc agcaccggcc gttcacctgc  
 180  
 ttccactggc acttccctcaa ccagcggcgc cgcaggcccc tccgcaggcg cgacggcacc  
 240  
 ttcaactaca gcccgcagct gtactgctcc aagtacaacg aagccaccgg cgtgtgcccc  
 300  
 gacggcgacg agtgtcccta cctgcaccgg acgacggggg acacagaacg caagtaccac  
 360  
 ctgcgttact acaaaacagg aacctgcctc cacgagacag acgcacgtgg ccactgcgtg  
 420  
 aagaatgggc tgcactgtgc cttecgccac gggcccccatt acctccgctc cctgtctctc  
 480  
 gacatcaggg agcttcaggc catggaggcc ttgcagaatg gccagaccac ggtagagggg  
 540  
 agcatagagg gccagtcggc tggggctgctg agccatgcc tgaatagaaa gatcctcagc  
 600  
 gaggagcctc ggtggcaaga gactgcttat gtgctgggga actataagac ggagccttgc  
 660  
 aagaagcccc cgcggctgtg ccgccaaggc tatgcctgtc cctactacca caacagcaag  
 720  
 gaccggcggc ggagcccccg gaagcacaaa tacaggctgt ctccatgtcc aaacgtcaag  
 780  
 cacggggatg agtggggaga ccctggcaag tgtgagaacg gagacgctg ccagtactgc  
 840  
 cacacccgca ccgagcagca gttccacccc gagatctaca agtccaccaa gtgcaacgga  
 900  
 aggggggggg gggtagggga gg  
 922

&lt;210&gt; 2508

&lt;211&gt; 278

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 2508

```

Pro Gly Cys Cys Arg Tyr Leu Lys Glu Phe Arg Thr Glu Gln Cys Pro
 1           5           10           15
Leu Phe Ser Gln His Lys Cys Ala Gln His Arg Pro Phe Thr Cys Phe
 20           25           30
His Trp His Phe Leu Asn Gln Arg Arg Arg Pro Leu Arg Arg Arg
 35           40           45
Asp Gly Thr Phe Asn Tyr Ser Pro Asp Val Tyr Cys Ser Lys Tyr Asn
 50           55           60
Glu Ala Thr Gly Val Cys Pro Asp Gly Asp Glu Cys Pro Tyr Leu His
 65           70           75           80
Arg Thr Thr Gly Asp Thr Glu Arg Lys Tyr His Leu Arg Tyr Tyr Lys
 85           90           95
Thr Gly Thr Cys Ile His Glu Thr Asp Ala Arg Gly His Cys Val Lys
100           105           110
Asn Gly Leu His Cys Ala Phe Ala His Gly Pro His Asp Leu Arg Ser
115           120           125
Pro Val Tyr Asp Ile Arg Glu Leu Gln Ala Met Glu Ala Leu Gln Asn
130           135           140
Gly Gln Thr Thr Val Glu Gly Ser Ile Glu Gly Gln Ser Ala Gly Ala
145           150           155           160
Ala Ser His Ala Met Ile Glu Lys Ile Leu Ser Glu Glu Pro Arg Trp
165           170           175
Gln Glu Thr Ala Tyr Val Leu Gly Asn Tyr Lys Thr Glu Pro Cys Lys
180           185           190
Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro Tyr Tyr His
195           200           205
Asn Ser Lys Asp Arg Arg Arg Ser Pro Arg Lys His Lys Tyr Arg Ser
210           215           220
Ser Pro Cys Pro Asn Val Lys His Gly Asp Glu Trp Gly Asp Pro Gly
225           230           235           240
Lys Cys Glu Asn Gly Asp Ala Cys Gln Tyr Cys His Thr Arg Thr Glu
245           250           255
Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys Cys Asn Gly Arg
260           265           270
Gly Gly Gly Val Arg Glu
275

```

&lt;210&gt; 2509

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2509

```

gccggccttg acctgggccc ggcatggct ccacggcaag gtccaataact ccgtgcgctt
60
gtggcgctgg acttcgtcga tgcccgcgag gttttgctgc ccgcgaccat tggactggac
120
gttcatgaac ggggtggagcc cggcaaaacc gaaactcaac caatccttgg ggatgctgga
180
cggcaggttg ccgagggcaa acacgttgac cacgttcgca ccgacaccac cgaccacggc
240
caccgctccc agcggaatct cgtagactta gcgccagggt tggtaaggcg ttagcggtc
300

```

gtaacgacgg gtgacctcga actcggggct tcaaagtctt ctgctgtg  
348

<210> 2510

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2510

Met	Ala	Pro	Arg	Gln	Gly	Pro	Ile	Leu	Arg	Ala	Leu	Val	Ala	Leu	Asp
1				5					10					15	
Phe	Val	Asp	Ala	Arg	Glu	Val	Leu	Leu	Pro	Ala	Thr	Ile	Gly	Leu	Asp
			20					25					30		
Val	His	Glu	Arg	Val	Glu	Pro	Gly	Lys	Thr	Glu	Thr	Gln	Pro	Ile	Leu
		35					40					45			
Gly	Asp	Ala	Gly	Arg	Gln	Val	Ala	Glu	Gly	Lys	His	Val	Asp	His	Val
	50					55					60				
Arg	Thr	Asp	Thr	Thr	Asp	His	Gly	His	Arg	Ser	Gln	Arg	Asn	Leu	Val
65					70					75				80	
Asp	Leu	Ala	Pro	Gly	Leu	Val	Arg	Arg	Val	Ala	Val	Val	Thr	Thr	Gly
			85						90					95	
Asp	Leu	Glu	Leu	Gly	Ala	Ser	Lys	Ser	Ser	Ala	Val				
			100						105						

<210> 2511

<211> 663

<212> DNA

<213> Homo sapiens

<400> 2511

nnacgcgtgt gggaccatat caggggagcc cgatggttct caggaaggg ccggggtggg  
60  
tccctgacta ggctgctgtc gttggctccc gtcgtcaacg agcaagatct gcaagtgtct  
120  
cctgtcatcg cacacgtcgg ttatccgcag gccgccgacg agtattacca gttgctttta  
180  
gcattacgcc caggacgcgt tgctggcctg gccgagatcg tcgtcaacgg tcaacctttt  
240  
accgtcactg acgccactga ggatgaacta gctctcactg cttgggctcg tctcctctc  
300  
gagggaaactc ccatcgccat ggatggatcg tggcagctgc atcgccgtcg agcggccctt  
360  
gagccagttc ggttcgctaa gcgcttcggt ggtgagcaat cgaacacctc gatcatgggt  
420  
ggcgacgcca tcatcatcaa aatgttccgc cgctggagc ccggcgacaa ccttgacatc  
480  
accgtgcata gcgccctcaa cgatgccggg atctcatcgg tggccacatt gtacggcttt  
540  
atgtccggac agatccccgc tgaggaacac atcccggtcg atctagctat gatcattgag  
600  
agggtgccac agccccggga tggctgggaa ctcatcactg ccaaggcagt cgatctcgtc  
660  
gac  
663